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EVALUATION OF THE FIELD TEST OF PROJECT INFORMATION PACKAGES:

Volume I - Viability of Packaging

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Project Information Package
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9a
9b

- Project Catch-Up
- Project Conquest
- High Intensity Tutoring
- Intensive Reading Instructional Teams
- Programed Tutorial Reading
- Project R-3

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Prepared for:

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ABSTRACT

The United States Office of Education (USOE) in 1973 commissioned the creation of Project Information Packages (PIPs) that could fulfill USOE's aims for a cost-effective mechanism for disseminating exemplary programs beyond their developers to school districts with less successful compensatory educational projects. Three volumes report the first year results from a two-year field test of PIPs. Volume I reports on the viability of the packaging concept based on the first year of PIP project implementation. The concept of PIPs is examined so that the evaluation can show which parts of the concept appear sound, which do not work, and which can be remedied. The report also explores whether, on the basis of PIPs, packaging can be considered a feasible dissemination device for USOE to employ. The six PIPs selected are described, as are the physcial features of the package. Seventeen school districts participated as field-test sites of the PIPs. Since two of these districts had been assigned two PIPs each, there were 19 projects in all. The major portion of the report concerns the evaluation design and the PIP project outcomes in terms of student achievement, student attitudes, and staff and parental attitudes. (Author/MLF)

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Final Report *December 1975*

EVALUATION OF THE FIELD TEST OF PROJECT INFORMATION PACKAGES

Volume I Viability of Packaging

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Prepared for:

U.S. OFFICE OF EDUCATION
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PREFACE

This is a report of the first year results from a two-year field test of Project Information Packages (PIPs). The field test is sponsored by USOE under Title III, Section 306, of the Elementary and Secondary Education Act. The evaluation was commissioned by USOE's Office of Planning, Budgeting, and Evaluation.

SRI is the prime contractor for the evaluation of the field test of PIPs; RMC Research Corporation, developer of the PIPs, is the subcontractor. The first year of the evaluation focused on the viability of PIPs as a mechanism for getting exemplary programs implemented in new sites. The focus for the second year is to be on project outcomes. Final conclusions about the success of packages as a dissemination mechanism must await information to be obtained during the second year of the field test.

In Volume I we report on the viability of the packaging concept, based on the first year of PIP project implementation. Volume II reports the results of a formative evaluation of the PIPs and recommends revisions. Volume III reports the results of a resource/cost analysis of PIP projects.

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An evaluation project with the scope and complexity of the field test of the Project Information Packages (PIPs) is dependent on the cooperative efforts of a large number of people. This report not only reflects the work of many individuals, but also the authorship of some of them. Many sections were first drafted by others and were eventually incorporated at my discretion. Although the authors of some sections may no longer recognize their work and although none of them should be considered responsible for any errors, each one deserves my gratitude.

Christine Padilla stuck with the report writing and coordination effort throughout and contributed sections on parent participation, technical assistance, and other pieces. She and Elizabeth Milrod pulled together materials for the sections on the study design and data collection plans. The results of the start-up stage were written by Dorothy Booth, Jay Cross, Cassandra Duarte, Phillip Giesen, Georgia Gillis, and Margaret Needels who are also the SRI site visitors and PIP specialists. Charles Norwood analyzed all student test and inventory data and, assisted by Jay Cross and Elizabeth Milrod, drafted all the pertinent parts of this report on student outcomes. Contributions to the chapter on analysis strategy and to the section on implementation results were made by John Emrick, who was also the assistant director of the evaluation for design and analysis during the first year of the PIP field test. Susan Peterson who was assistant to the project leader, authored the entire section on staff impacts. Sherry Hanks was the authority on the selection/adoption stage and drafted that section of the report. No one

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I INTRODUCTION

In this chapter we give the background of Project Information Packages (PIPs). We describe the early stages in the evolution of the packaging concept before USOE commissioned RMC Research Corporation to define the PIP concept and create a set of PIPs. In Chapter II we describe the PIP concept, its principles and assumptions, and the six PIPs. In Chapter III, we describe the field test of PIPs and SRI's evaluation. In Chapter IV we describe the results of the evaluation and in Chapter V we summarize the lessons learned about PIPs and the packaging concept in general.

Background of Federal Dissemination of Educational Programs

During recent years, various parts of the Education Division of HEW have begun to focus on the dissemination of successful and useful educational practices and technologies. Based on, but differing somewhat from an earlier, less specific desire to spread innovative practices from federally funded projects and improve federal program performance, both USOE and the National Institute of Education (NIE) have moved in the direction of designing mechanisms or systems to bring successful educational practices to school districts that lack such practices.

NIE has focused on the discovery and appropriate utilization of systems that could link the existing information and research and development (R&D) products and services to educators in schools and districts. At present, USOE is trying to get specific programs or practices that have already proved successful in one school or district adopted by other schools or districts. USOE is primarily interested in promoting the replacement of unsuccessful practice by successful practice, not in promoting the influence of R&D on educational practice. To achieve this goal, USOE is trying out several methods. The Division of Supplementary Centers and Services, which has administered Title III of ESEA, has established a National Diffusion Network where facilitators in each state introduce successful projects from their own or other states to interested local school districts within their jurisdiction. Under the Right-to-Read program and a "packaging and dissemination" effort administered jointly by the Office of Planning, Budgeting and Evaluation (OPBE) and the Bureau of School Systems (BSS), the concept of complete information packages is being tried out to get exemplary programs into school districts without costly or inefficient personal visits, demonstrations, and exchanges.

Rationale for Packaging

Information dissemination, such as the "It Works" and PREP series, which consist of sets of booklets describing instructional programs that promoted achievement gains in various disadvantaged target populations, have not noticeably influenced practice in the schools. Nor have demonstration projects accomplished the dissemination of successful programs, as was originally hoped. These experiences, in addition to the results of studies of organizational change, indicated that a more sophisticated concept of information dissemination was necessary. To change practices in a school district requires more than just communicating a general description of the program of another district. OPBE staff felt that the local education agencies (LEAs) first must be made aware of the options available to them and how some of the successful programs might fit their needs, then must be provided with "how-to" packages to permit installation of the selected project in the new district. Through its evaluation of Title I and other compensatory education projects, OPBE was sensitive to the fact that there were many LEAs whose compensatory education projects were unsuccessful in terms of achievement gains and assumed that these districts would want to replace their ineffective projects with projects that had been proved effective. OPBE hoped that many school districts would be anxious to obtain packages designed to promote implementation of successful programs for disadvantaged children. The less technical assistance that had to be provided to supplement the packages, that is, the more autonomous the packages, the less expensive the implementation would be for the government and presumably for LEAs. Earlier experiences, such as Follow Through, where successful project directors trained staff and assisted LEAs in implementing their exemplary programs, showed that training and assistance from outside the district could be extremely expensive. Follow Through costs were between $600 and $700 extra per child.

OPBE's packaging concept incorporated several ideas that differentiated it from other dissemination strategies:

- Program Replication. The concept of replication implies that, if the key elements of an effective program can be reproduced in a new site, then the results of the program should also be reproduced.
- Autonomous Package. The package was to be a complete and self-contained collection of information and instructions assembled and structured in such a way as to enable educators at a new site to select a program and implement it. The package was to contain sufficient "do-it-yourself" information to reproduce the program without assistance.

Scope of the Packaging Problem

To create packages and justify federal support for their use, a set of critical questions must be answered:

(1) Can an autonomous package be designed to promote replication of an exemplary program in a new site?

(2) Do the programs that result from use of the autonomous package produce the same student achievement outcomes as the original exemplary programs?

(3) Can the new programs be implemented at reasonable cost?

Before the first question can be answered, the following problems must be addressed:

(1) On what basis should exemplary programs be chosen for packaging?

(2) What are the essential features of these programs?

(3) What is the most effective design for communicating these essential features?

These last three problems might be solved in a number of ways. There are probably as many alternative methods of selecting programs and formatting packages as there are people to create them.[*] However, in this report we focus on only one solution. We examine the joint USOE-RMC Research Corporation concept of PIPs. In Chapter II we describe the nature of the PIP concept so that we can show, from our evaluation, which parts of the concept appear sound, which do not work, and which can be remedied. We also explore whether, on the basis of PIPs, packaging can be considered a feasible dissemination device for USOE to employ.

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[*] As one example, USOE's Right-to-Read Program Office has developed packages that improve on an earlier version consisting only of curriculum kits and brochures describing them.

II THE PIP CONCEPT

In the spring of 1973, USOE issued a request for proposals to identify successful programs and to design a first set of eight PIPs. RMC was commissioned to create packages that could fulfill USOE's aims for a cost-effective mechanism for disseminating exemplary programs beyond their developers to school districts with less successful compensatory educational projects.

Although RMC has prepared a clearly written report of their activities carried out under contract to USOE (Tallmadge, 1974), we feel it is important to present the background and description of the PIP concept here. First, we encountered the varying degrees of skepticism that one usually encounters whenever the dissemination of educational programs via packages is mentioned. This skepticism, however, is based partly on misconceptions of the actual PIP concept as rendered by RMC. Beliefs about PIPs are often based on observations of or experiences with commercial curriculum packages, rigid planning kits, or sets of vague management guidelines. We hope that the descriptions of the various aspects of and the principles embodied in the PIP concept will dispel some of the initial skepticism about it. The assumptions or prognoses that are not satisfied by our description must await the results of the PIP field test for verification or refutation.

Second, a description of the solutions to the problems of selecting exemplary programs, determining the essential features of those programs, and designing packages to accomplish the replication of those programs in new sites sets the stage for the rest of the evaluation report. The description of PIPs that follows establishes the assumptions and principles embodied in the PIP concept so that in Chapter V we can examine them--one by one--for their soundness in light of the results of their first field test.

Under contract to USOE, RMC undertook to solve the problems outlined in Chapter I. They (1) developed criteria for selecting operational approaches to compensatory education worthy of widespread use and amenable to installation in other schools, (2) selected successful compensatory education programs for packaging, (3) designed a model of what types of information the PIP should contain and what the media should be, and (4) developed project-specific models for each of the successful programs and prepared PIPs on the basis of them.*

Criteria for Identification of Exemplary Programs

A great deal of time and effort was spent developing criteria for and selecting exemplary programs. An elaborate search and review procedure was then designed for use in selecting 8 projects for packaging.† Over 2,000 projects were suggested or recommended for consideration; after an initial screening, over 100 went through the most thorough review procedure.

Project selection criteria were developed jointly by RMC and OPBE in three primary areas: effectiveness, cost, and availability and replicability.

Effectiveness

The effectiveness criterion had two separate aspects, statistical and educational significance. Both were cast in terms of (a) the pre- to post-test gains of project participants and

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*Adapted from Tallmadge, 1974.

†See Foat, 1974 for a detailed description of the selection process.

> (b) the gains which would have been expected had they not received the special treatment. The educational significance criterion which was agreed upon specified that observed gains had to exceed expected gains by at least one-third standard deviation with respect to the national norms. The statistical significance criterion specified that the difference between observed and expected gains had to reach or exceed the five percent confidence level using a one-tailed statistical test.[*]

Since there were almost no cases in which a control group was used in evaluations, RMC decided that "expected gains" for students in compensatory programs would mean that the group remained in the same percentile on both a standardized pre- and post-test. Then any group that exceeded these expected gains by at least one-third standard deviation (with reference to the norm distribution of a particular test) met RMC's criterion for educationally significant gains. RMC did not always test for statistical significance and they sometimes used methods other than the norm referenced method described here. It was admittedly an arbitrary way to determine educational significance but no acceptable alternatives have been agreed upon in the field of education.[†]

Using these criteria to select programs that were successful enough to be recommended to others turned out to be extremely difficult. "Not one of the several hundred project evaluations which were examined provided acceptable evidence regarding project impact."[‡] Even where adequate data had been collected, analysis and reporting practices were such that inferences had to be drawn with caution. To meet the effectiveness criterion, RMC decided that evidence of statistical and educational significance had to be found in two instances, for example, at two different grade levels or for two different years. Under these conditions, only six projects met the effectiveness as well as other criteria.

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[*] Tallmadge, 1974, p. iii.

[†] RMC published a practical guide to project evaluation on the basis of their experiences in searching for exemplary programs. SRI used the methods described in this booklet by Tallmadge, Horst, and Wood (1975) to evaluate student achievement in the PIP field test.

[‡] Tallmadge, 1974, p. iv.

Cost

Although attempts were made to find inexpensive programs that were also effective--to make it more likely that programs would be exportable to many sites--a recurring cost of $475 per pupil was eventually established as the upper limit for projects selected, with the additional provision that start-up costs not exceed $1,000 per pupil.

Availability and Replicability

These areas were more judgmental and were based on the fact that the packages were likely to be disseminated--at least on a trial basis--under the auspices of the federal government. Projects were rejected on the criterion of availability if directors and staff were unwilling to cooperate in helping the packaging effort or the project was no longer operating and could not be visited for validation. Projects were also rejected if they were not operating in public schools or if their selection would amount to a USOE endorsement of a single publisher's or manufacturer's commercial product(s). Projects were rejected on the criterion of replicability if they required resources not generally available in typical school districts. This included highly unusual personnel, equipment, or environments. Examples of projects rejected on replicability grounds are a university-operated elementary school and a project requiring major architectural modifications to the typical school building.* Since USOE felt that PIPs might eventually be disseminated for

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*Tallmadge, 1974, p. iii.

Title I projects, RMC excluded from their search programs that were not aimed at reading and mathematics achievement for disadvantaged children in kindergarten through twelfth grade.

Characteristics of Programs Meeting Criteria

Although RMC tried to find eight, only six projects were found that met the criteria and were eventually selected. The six projects were presented to USOE's Dissemination Review Panel and were approved as exemplary. They are:

Project Catch-Up	Newport-Mesa Unified School District Newport Beach, California
Project Conquest	School District 189 East St. Louis, Illinois
High Intensity Tutoring (HIT)	School District of the City of Highland Park Highland Park, Michigan
Intensive Reading Instructional Teams (IRIT)	Hartford Public Schools Hartford, Connecticut
Programed Tutorial Reading (PTR)	Davis County School District Farmington, Utah
Project R-3	San Jose Unified School District San Jose, California

We describe the six programs below and present in Table 1 a brief summary of the characteristics of each program.

Catch-Up

Catch-Up is designed to provide remedial instruction in reading and arithmetic to disadvantaged children in schools serving low-socioeconomic-level suburban areas. Although the program serves children from preschool through twelfth grade, the dissemination of Catch-Up is restricted to the elementary portion of the program, kindergarten through sixth grade. The

Table 1

CHARACTERISTICS OF THE SIX EXEMPLARY PIP PROGRAMS

Program	Catch-Up Newport Beach, California	Conquest East St. Louis, Illinois	High Intensity Tutoring (HIT) Highland Park, Michigan	Intensive Reading Instructional Teams (IRIT) Hartford, Connecticut	Programed Tutorial Reading (PTR) Farmington, Utah	Project R-3 San Jose, California
Subject areas	Reading and math	Reading	Reading and math	Reading	Reading	Reading, math, and social studies
Students served	Students in Grades K-6 who need help in reading or math; average student-teacher ratio, 5:1.	Students in Grades 2-6 who are two years or less below grade level, and first grade repeaters; student-teacher ratio, 6:1.	Students in Grades 6 or 7 one to five years below grade level tutored by students in Grades 7 or 8, at least two years ahead of them, on a one-to-one basis.	Students in Grades 3 and 4 who need help in all areas of language arts; student-teacher ratio, 15:1.	First graders who need help learning to read are tutored on a one-to-one basis.	In the project's first year, all seventh graders in heterogeneous classes (gifted and slow learners); student-teacher ratio, 20:1.
Nature of program	Students come from classrooms to the Catch-Up lab every morning. The lead teacher, the two other teachers, and the aide work independently with children for 30 minutes. Parent aides assist in instruction.	Students come from classrooms to reading rooms (Grades 1-3) or clinics (Grades 4-6) for 45 minutes each day. Heavy diagnostic testing determines areas that the lab clinicians will work on with each student.	One tutor works with one tutee using programed curriculum for 20 minutes under supervision of a reading or math specialist and two aides. Rewards are earned by tutors as well as tutees.	Forty-five students from several schools are brought to one site each morning for 10 weeks for intensive instruction by three language arts specialists in three 50-minute sessions.	Students are tutored apart from their regular classrooms for 15 minutes a day by paraprofessional tutors; programed kits designed for the basal reader used in the classroom are the only curriculum materials used.	Forty-five minute periods of reading, math, and social studies offer an integrated curriculum oriented to gaming stimulation, individualized instruction, and an intensive involvement study trip. A cadre staff (one teacher per subject) moves with students to Grades 8 and 9.

major instructional emphasis of the program is placed on the diagnosis of learning problems through extensive use of criterion-referenced tests. These procedures are used to ensure that students experience constant success. Learning experiences are individually prescribed and are provided by a special staff of certified part-time teachers and instructional aids in an attractive "laboratory" environment. It is essential to the philosophy of the program that each teacher be responsible for the gains of 18 students; the teacher is allowed a great deal of autonomy in achieving these gains. The lab is contained within one available classroom in the school. The program operates only in the morning when both staff and students are fresh.

Conquest

Conquest is a clinical approach to reading that intensively diagnoses the child's reading problems through a 17-step diagnostic procedure and prescribes an individualized structured learning program to be followed by the child throughout the year. The teacher receives extensive training in remediation, testing, and related areas. The clinics (for grades 4-6) and reading rooms (for grades K-3) are separate from the regular classroom and serve several groups for 45- or 50-minute periods during the day.

High Intensity Tutoring

HIT was designed as a peer tutoring program using highly structured mathematics and reading materials for sixth and seventh graders in a middle school. Sixth grade participants are performing one to five years below grade level, and seventh grade participants at one to three years below grade level. At the two HIT centers (one in reading, one in mathematics) in each participating school, sixth and seventh grade tutees are tutored by seventh and eighth grade tutors. Tutors themselves are often performing one to three years below grade level, but they work with students who are at least two years below them. Candy and other rewards are awarded for good performance on the learning materials.

Intensive Reading Instructional Teams

The IRIT program is designed to raise the level of achievement of third and fourth grade pupils who are deficient in the basic skills of language and reading and to develop in them an appreciation for and pleasure in reading.

The IRIT program is divided into three 11-week cycles. Forty-five students are selected for each of the three cycles. During the cycle they have been selected for, the students leave their regular classrooms to attend the IRIT classes for three hours each morning, five days a week. The 45 students in the program are heterogeneously divided into three groups of 15 each. During the three-hour morning, each group of 15 students spends one hour on phonics, one on vocabulary and comprehension, and one on individual reading with each of three IRIT teachers. Thus, all 45 students are with each teacher every morning.

The IRIT center is located in a home school, which is a school within the district that has available space. Students participating in the IRIT program may come from the home school or from other schools within the district, which are referred to as sending schools.

Programed Tutorial Reading

PTR was developed by researchers at Indiana University who have assisted many districts in implementing the program. In the PTR exemplary site (Farmington, Utah) paraprofessionals or older students provide tutoring to underachieving first graders in beginning reading as a supplement to conventional classroom teaching. The tutoring strategy employs many of the elements of programed instruction: frequent and immediate feedback, specified format, and individualized pacing. Programed Tutorial Reading does, however, differ from programed instruction in the procedure for providing cues to learning. Programed learning stresses the use of many cues in the beginning, followed by a fading of cues. PTR provides a minimal number of cues in the beginning, followed by an increase of cues until the child can eventually make the correct response.

R-3

R-3 is a reading, mathematics, and social studies program that emphasizes student readiness, subject relevance, and learning reinforcement. All seventh grade students participate in R-3 and continue in the program during the eighth and ninth grades. Each student attends one 45-minute period in each of the three subject areas daily. Because R-3 serves an entire seventh grade, the group is heterogeneous, not composed of only low achievers.

The four essential components of the R-3 program are gaming/simulation activities, individualized instruction, an intensive involvement study trip, and parent involvement.

While the six exemplary programs seem quite different superficially--some for elementary grades, others for middle-school; some requiring nonprofessionals as instructors, others requiring certified reading specialists--the programs have several important characteristics in common. All but one program (R-3) are "pull-out" programs, that is, they supplement rather than replace the regular classroom teaching; they require students to leave class and go to another location to participate. In addition, except for R-3, these programs do not require regular classroom teachers to make changes in their methods or behavior other than adjusting schedules so that children can be released to participate in the project.

Identifying Essential Features to Package

RMC's report on the development of their PIPs makes it clear that they did not simply generate a model of the types of important information to include in packages as soon as they had selected exemplary programs. Rather, they had a general design and some ideas about how to improve on earlier packages; as they identified the exemplary programs, they reworked their design and refined the list of elements and their order. RMC continued to refine the overall PIP design even as they were specifying some of the last of the six individual packages.

Since the idea of developing PIPs was to enable replication of both a program and its effects, the logical way to make such packages would be to describe the features of the program that caused it to be effective in the first place and how they were related. To anyone familiar with the state of the art in education research, however, it should be clear that the "essential features" or necessary and sufficient conditions for generating any particular outcomes in reading, mathematics, self-esteem, or in any other area of human behavior are not known. In fact, it is rare when different studies show similar correlations between a set of resources or teacher characteristics or classroom strategies and achievement outcomes for children in an educational program. In short, no scientist or educator has been able to specify a set of features or conditions sufficient to bring about particular results in the behavior, attitudes, or achievements of children.

In the face of this, RMC's approach to the problem of determining program features to package seemed very reasonable. Trained psychologists, several of whom had been either teachers or curriculum designers, who had already reviewed hundreds of programs and noted the commonalities among the more successful ones, visited the six exemplary programs. They observed the obvious features of the programs; they noted features that differentiated these programs from each other and from others; they talked with the developers and participants in the programs in their original locations; they obtained the project directors' opinions about the important elements and the priorities among elements; and they called on the memories of the project directors about the original installation processes and the refinements of implementation made since installation. Then, using their own and the project directors' best judgments to determine the desirable outcomes at various stages and applying common logic to determine the necessary steps and timing of events that seemed likely to produce those outcomes, they described the features and specified the activities for the six exemplary programs at the level of detail that seemed appropriate.

Design for Communicating Program Features

The PIP concept developed by RMC comprised three distinct stages: selection/adoption, start-up, and operations. The PIPs themselves were designed to enable staff to install the project in a school district (the start-up stage) and to implement the instructional program and supporting tasks (the operations stage). An Analysis and Selection Kit (ASK) was planned to facilitate receipt of an appropriate PIP in the selection/adoption stage.

Description of PIPs

The PIPs were produced by a subcontractor to RMC, based on both the overall PIP model design and the detailed specifications developed by RMC for each individual program. PIPs are 18- x 14- x 12-inch boxes with nine upright drawers (or components) and one large flat drawer at the top (see Figure 1). Inside the drawers are booklets, such as the Project Management Directory, and brochures, filmstrips, cassettes, and charts.

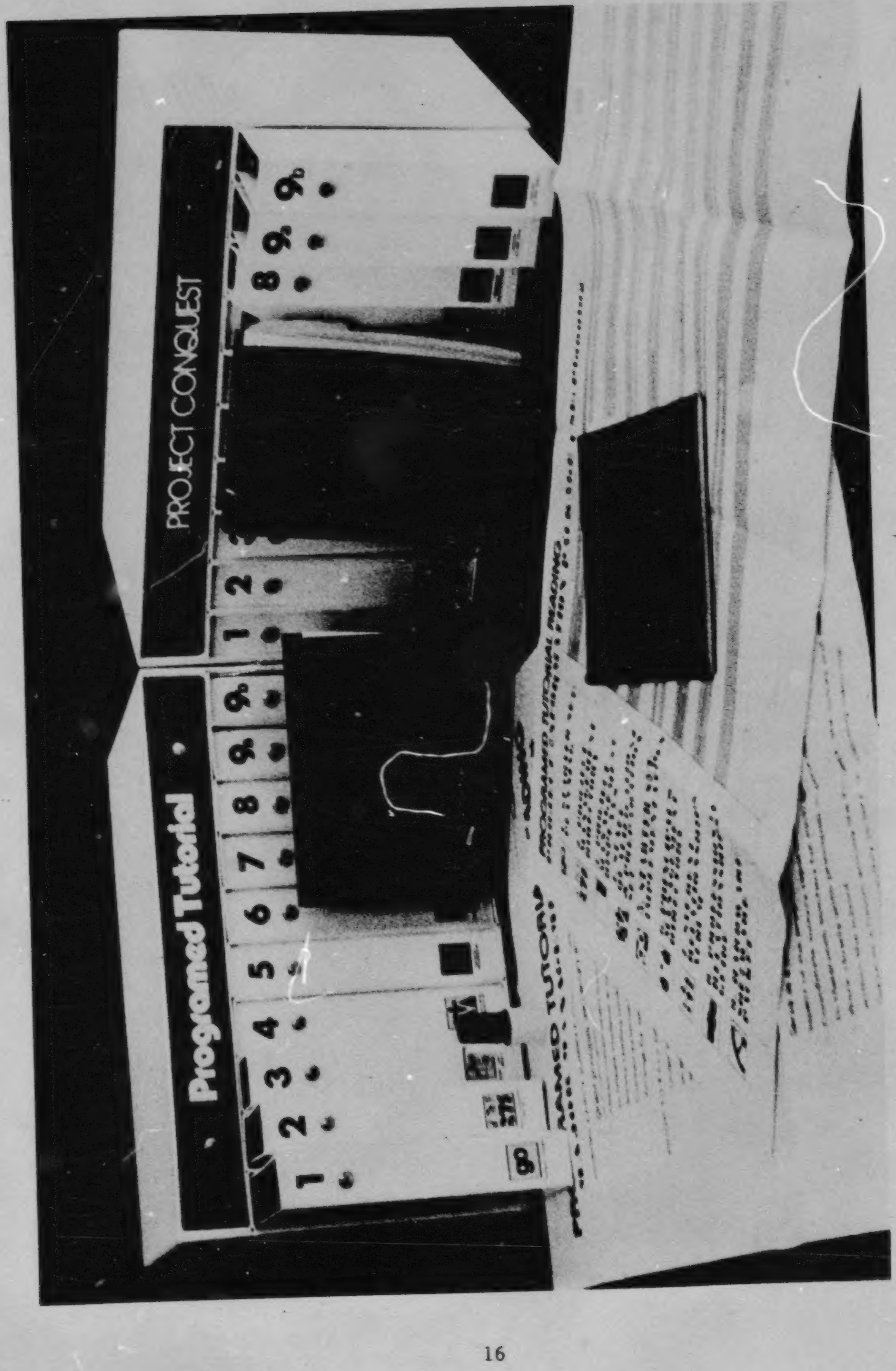
Programed Tutorial
1
2
3
4
5
6
7
8
9
9
PROJECT CONQUEST
1
2
8
9
9
PROGRAMED TUTORIAL READING

FIGURE 1 PROGRAMED TUTORIAL READING AND PROJECT CONQUEST PIPS

> The first four components were concerned with planning and other pre-implementation tasks required to equip, staff, and set up a new project in a school district. They were primarily intended to assist the director in installing the adopted project. The remaining five components were more specifically concerned with project implementation and were directly related to the day-to-day operation of the project after it was installed.*

Table 2 adapted from an RMC report (Piestrup, 1974), summarizes the PIP components and their purposes. The contents of each component are as follows:

Starter Set: Planning--This module provides the new project director with multimedia materials to use in presenting the project and in gaining support of parents, teachers, principals, and school boards. The purpose of this starter set is to explain briefly the key features of the project for a general audience and to elaborate on these features so the project director will be able to conduct subsequent briefings and answer questions on the project. This component includes brief one-page handouts and illustrated brochures for the project director to use in public relations. Also included are a filmstrip and tape cassette which describe such features of the program at the exemplary site as the location, size, and economic base of the community; the specific resources available to the project; and the socioethnic background and skill levels of the students served.

Project Management Directory--This manual brings together in calendar form the list of management activities for the project. Key tasks in installing and implementing the project are blocked by weeks so the

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*Tallmadge, 1974, p. v.

Table 2

SUMMARY OF PROJECT PIP COMPONENTS

Component	Personnel/Purpose	Contents
Installation (start-up) stage 1. Starter set: planning	For project director: Provides orientation to project Provides public relations materials on project and package Provides introduction to package (and director's role in project) For school boards, principals, regular school staff, potential project staff, parents: Provides information to elicit support	Filmstrip with cassette tape Handout brochure Project director's orientation booklet (with cassette tape for some projects) Viewfoils
2. Project management directory	For project management personnel (project director, assistant director, principal, as applicable): Provides detailed guidelines and support materials needed to plan and implement (operate) the project	Project management calendar Supplementary sections on the major management tasks
3. Project management displays	For project director and visitors: Provides time schedule overview Summarizes component use Displays component use and time schedule to visitors	Major management tasks chart PIP use displays
4. Staff qualifications and preparation set	For director: Provides personnel selection guidelines For staff: Provides self-evaluation and orientation materials	Staff qualifications checklist In-service training topics
Implementation stage 5. Starter set: implementation	For project classroom personnel: Helps in starting each type of activity (testing, teaching, other) including setting up environment for the first time	Implementation starter booklet Original art file
6. Classroom management directory	For project classroom personnel: Provides guidelines for classroom procedures Provides samples of materials needed for administration of the project, record forms, letters and notices, and the like	Teaching staff guide (e.g., a calendar and support materials)
7. Student relationships album	For project staff interacting with children: Describes the project environment, from the child's viewpoint, which staff is expected to create, e.g., how he should perceive staff; what learning climate he should experience (high pressure, self-directed, and so on) Distinguishes roles of different staff members in creating environment Describes desired student responses (e.g., confident, competent, happy, eager) and gives specific instances	Album
8. Professional relationships guide	For all project staff (plus principal): Defines roles in relation to all school staff (project and nonproject) with whom each project member interacts Provides descriptions of potential staff conflicts and suggested resolutions.	Guide booklet
9. Hardware/software packet	For project director and teaching staff: Aids in selection and ordering of commercial hardware/software Provides description, source, and features of core and supplementary items For teaching staff: Describes experience of original project staff plus modifications (if any)	Factsheets and manufacturers' brochures for core items Supplementary materials list with publishers' addresses, available factsheets, and brochures

Source: Piestrup 1974.

director can fill in the actual event, such as a meeting with the principal, on the day it will occur. The directory summarizes the tasks for each month in a checklist format to emphasize the importance of accomplishing the tasks as close as possible to the scheduled time. The directory also provides budget-updating summaries for each month for the director to fill in. Support documents with descriptions of how the original project accomplished each task, internal memos showing style of management, alternatives for dealing with difficulties, and other practical matters are included in the directory.

Project Management Displays--The displays are designed to attract attention to the existence of the project and to elicit questions or interest concerning it. The displays provide a time schedule overview and summarize the key tasks to be performed in developing the model project and the components to be used in performing the tasks.

Staff Qualifications and Preparation Set--This set provides project directors with information on hiring personnel. It contains a staff qualifications checklist and information on training topics and suggested agendum for training project teachers and aides.

Starter Set: Implementation--This module provides information for the early weeks of instruction in the new project and includes materials for decorating the classroom, a detailed calendar for the first two weeks of school, and descriptions of how to begin each new activity (testing, teaching, and the like). The idea of the Starter Set: Implementation is to enable new staff to create an attractive environment appropriate for the region where the project is being implemented and not to package the particular bulletin boards or decorations used at the originating site.

This component therefore includes only materials that will be useful in a variety of contexts other than that for which they were originally designed.

Classroom Management Directory--This directory, designed to correspond to the Project Management Directory in format and purpose, contains day-by-day management instructions for the classroom teacher. Calendar entries indicate the sequence of events and remind teachers to perform key tasks throughout the year. The directory includes monthly task summaries in a checklist format, budget records, and supplementary sections explaining alternative strategies for accomplishing tasks and anticipating problems and describes the practical details of operating an instructional system.

Student Relationships Album--This album describes the roles of staff members in relation to students. Role illustrations are presented to convey the "flavor" of the project from a child's viewpoint.

The album deals with the difficult areas of attitude change, self-concept development, fostering achievement orientation, and eliminating prejudice. A holistic, descriptive approach with photographs and critical incidents mediates the information in this component.

Professional Relationships Guide--This guide describes problems and conflicts that occurred at the exemplary site and suggests ways of forming good working relationships in the new project. The guide defines the roles and responsibilities of project and nonproject staff in relation to one another.

Hardware/Software Packet--This packet provides information on instructional materials and equipment, some of which are optional. The packet contains publishers' and manufacturers' brochures describing the materials and instructional hardware to be used. Space is provided for recording comments and information on new products and materials that prove to be effective.

Flat Art File--This file contains reproductions of display materials developed by the original project and instructions (sometimes accompanied by templates) for the production of other materials. It enables the adopting school to make use of project-developed materials designed to enhance motivation, improve self-concepts, or facilitate skill development.

Analysis and Selection Kit

The introduction of the packages to potential users and the processes within the LEAs for selecting a program and deciding to adopt it were not encompassed by the PIPs. An Analysis and Selection Kit (ASK) was conceived, and a prototype was developed which consisted of:

(1) A brochure for wide dissemination describing the six exemplary programs and their availability in the form of PIPs (this kind of brochure had been available for other package dissemination programs such as that sponsored by the Right-to-Read program).

(2) Further information about each program that could be obtained upon request (this information was to enable an LEA to choose that program which was best suited to its needs).

(3) A set of orientation materials (actually the very materials contained in the Starter Set: Planning component of the PIP) to enable LEA staff to orient school board, community, instructional staff, and the like, to the selected program.

The ASK had barely reached the prototype stage when USOE found an opportunity to test the PIPs in the field.

Principles and Assumptions in the PIP Concept

In this section we mention several assumptions underlying the PIP concept and describe the design principles of the ASK and PIPs.

In developing their concept RMC assumed that the federal government would provide LEAs with the financial support for project implementation and would monitor the process to ensure replication. They also assumed that LEA staff would be anxious to obtain a PIP and to follow instructions exactly in order to replicate the original program, since it had been validated as successful. The degree of actual replication that RMC assumed LEAs would be able to achieve is not clear. Since the PIPs are primarily information about who should do what and when, it appears that deviations from specifications on any of these dimensions at the level of detail contained in the PIPs would be considered nonreplication of the management components. Such a deviation could presumably lead to nonreplication of an essential element of the instructional program.

The three-stage model mentioned earlier contains within it a principle of dependency among the stages. Within this there is an especially strong emphasis on the expected outcome of the selection/adoption stage: the match between the exemplary program site and the site receiving the PIP. Other principles are described below under Management Orientation and Staff Selection.

Dependency Among Stages

The three-stage model of project implementation is one of the organizing principles of the PIP concept. While the three stages characterize three fairly distinct functions--obtaining the project, mobilizing the resources, operating the project--the activities within stages may overlap in time. As a description of events that must take place when an innovation is adopted, these categories are similar to those that others have used (Berman and McLaughlin, 1974; Rogers and Shoemaker, 1971; Havelock, 1970).

The principle of stages of implementation in the PIP concept is complex and is not simply a matter of saying, for example, that a project cannot start operating until the staff has been hired. There is a dependency among stages which implies that appropriate implementation of a later stage is dependent on the appropriate outcomes of an earlier stage. For example, instructional programs cannot be replicated unless all events of the preceding stage (start-up) have reached their appropriate conclusions, that is, unless instructional staff with appropriate skills and attitudes have been hired; students have been selected according to criteria specified in the package; facilities, equipment, and materials have been acquired as specified, and school principals and teachers have been supportive. Stage dependency implies that people cannot carry out the appropriate start-up activities unless the selection/adoption stage has reached its appropriate conclusion, which is that the district receiving the PIP is like the district in which the exemplary program was originally developed. It is not clear on which features or at what level of detail it was essential for the two districts to match. Some clues to that are the socioeconomic and other contextual features of the exemplary site described in the Starter Set: Planning component of the PIP itself.

Soon after the beginning of the PIP field test, the extent to which the PIP model assumed dependencies among activities within stages as well as between stages become unclear. For example, was it necessary for arrangements to be carried out by the persons specified and on the date and in the sequence specified by the PIP in order to have the appropriate space and facilities? Because such a principle would have serious implications for the evaluation, RMC created a revised and elaborated PIP model based on early observations. This model of intended relations (shown as Appendix C in Volume II of this report) distinguishes the activities at each stage from the outcomes of those activities and thus refines the meaning of this principle of the PIP concept: implementation of subsequent stages is dependent upon appropriate outcomes of the previous stage--not upon the particular methods or procedures used in the previous stage.

> Time Sequence and Management Orientation
>
> It was felt that a major improvement over previous attempts would result from the integration of management functions with the instructional paradigms of the projects selected for replication. This approach would contrast markedly with the standard approach which simply described an operating program without consideration of what must be done and by whom in order to install and maintain the program.*

The real innovation of the PIPs over earlier packaging attempts is their project installation and management focus. Information in the PIPs is designed for the director of the project and the instructional staff to enable them to mobilize resources for the start-up stage and to implement the program in the operations stage.

Primarily aimed at the start-up stage, the PIP contains a management strategy. The PIPs specify who is to do what and when, give information on the kinds of personnel to hire and suggest means for establishing appropriate relationships with school principals and other personnel within the schools. Each PIP reflects, by recital of events in the exemplary program site and by examples of actual memos, the management style of the project director in the original site. Informational filmstrips and other descriptive materials of the exemplary program are included for the project director's orientation to the exemplary program as a whole and for use by the project director in orienting others to the nature of the project to be replicated. However, the components addressed to the project director emphasize the sequence of activities and the events that must be accomplished to install the project. The Project Management Directory is organized throughout with calendar pages showing tasks to be accomplished weekly or monthly.

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*Piestrup, 1974, p. 4.

The components addressed primarily to the instructional staff also specify tasks and time schedules. The major component addressed to teachers, the Classroom Management Directory, focuses on teacher-child ratios, classroom arrangements, the length of instruction in various topics, and the like. The Management Directory does not prescribe instructional interactions between teachers and children nor does it describe the nature of teaching-learning episodes. For the tutoring projects (HIT and PTR) the instructional processes are almost entirely specified by the programed materials themselves, but otherwise teachers and aides are not advised how to teach.

Staff Selection

Another principle that RMC incorporated into the PIP concept was that people with the right characteristics, skills, and abilities make a project work. Thus, one must select the right people, who, with the information given in the package, can carry out the project. Thus, it is necessary and sufficient to select the teaching staff according to PIP specifications. With only the Classroom Management Directory, the Student and Professional Relationships Guides and the Hardware/Software Packet, such teachers will replicate the effective instructional program.

A corollary of the selection principle is that packages are not designed to train people. They contain neither programed materials for training staff nor specific instructions on how to interact with children. Rather, the packages assume appropriate staff selection and contain information sufficient for qualified people to work with.

RMC staff has observed that the project directors of the exemplary programs were by and large experienced and capable, and often dynamic and charismatic people. In addition, the teachers participating in the exemplary programs were exceptional. The finding that the kinds of people involved in a project make that project successful is not an unusual finding in any field. The PIP concept took advantage of this fact; instead of making a package that attempted to include enough instructions to enable anyone to carry out a project, RMC assumed that there were potential directors, similar to those of the exemplary programs, in many places. In fact, RMC realized that a package, no matter how much it was geared to training, could not create a competent educator and manager. RMC also assumed that, with appropriate information, project directors would be able to hire and provide in-service training for an appropriate staff. Using the PIP guidance and information about the original programs, the project staff would then know enough to implement the exemplary program.

Autonomy

The PIPs were not designed to train staff nor, on the other hand, were they packages which simply referred users to other agencies or documents for assistance. Assuming that staff with qualifications and experiences similar to those in the exemplary project sites could be hired, RMC designed the PIPs to be as autonomous as possible. For example, in the Hardware/Software Packet there were to be reviews of materials by previous users and recommendations of materials for various educational purposes. There were also catalogs from which materials and equipment could be ordered directly. Thus, it would not be necessary for administrators or teachers to seek advice from other educators.

USOE's concept of autonomy was that packages should provide an alternative to dissemination methods which involved going to the original or demonstration site or being trained by people with previous experience in the program.

RMC realized that in a few instances the packages would have to contain suggestions for assistance from outside the project staff, although not necessarily from outside the district. Assuming that good projects require evaluation, especially if they are to be supported by ESEA Title I funds, the PIPs recommend obtaining the assistance of an evaluator. This could be someone who might also help with measurement and selection of pupils for participation in the project. Assuming that not all potential project leaders will have knowledge of every aspect relevant to a project, the preservice training* component in some PIPs suggests supplementing within-staff expertise with an educational consultant--someone, for example, who has more experience working with the gaming/simulation techniques or with disadvantaged children. There was, therefore, some minimal technical assistance recommended in the packages.

Assumptions by Stage

Selection/Adoption

As indicated earlier, a general framework for getting the PIPs into the hands of appropriate LEAs was assumed in order to begin designing the ASK but, until the Spring of 1974, specific plans for sending information and preparing guidelines, receiving applications, making decisions, and awarding grants were not formulated. Thus the development of ASK and the development of actual methods for disseminating packages were not well coordinated. Nevertheless there were some original, common USOE-RMC assumptions about the process of disseminating the packages to potential users which were a part of the PIP concept. These can be summarized as follows:

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*In this report preservice training has been used to mean training prior to the beginning of the projects' instructional activities. It is not used in its ordinary meaning of teacher training in colleges prior to any teaching service in the schools.

- Previous evaluations of a national scope had indicated that many compensatory education projects were not successful in increasing achievement gains. RMC presumed that LEAs with unsuccessful compensatory education programs would be interested in replacing them with programs whose effectiveness had been proved. Thus, it was assumed that motivation was present to select and adopt a new program. Both ASK and PIPs were dependent for their use on the motivation of LEAs and it was assumed that the incentive for LEAs was the replacement of their unsuccessful practices by a project with a high likelihood of success in terms of student achievement.
- RMC assumed that LEA staff would receive and use the information about the original sites to choose the exemplary program best suited to their needs and most likely to fit within the context of their school district. There was to be enough information about the original community characteristics, schools, and program styles available to potential adopters so that they would not select a program whose original context did not match their own.
- At the original sites, project directors were experienced and capable people at the district staff level who were allowed some independence of action. RMC assumed that similar people would emerge to lead or be involved in the grant proposal effort in the field-test sites during the selection/adoption phase and that they, like the original project directors, would have the expertise required to hire, train, and provide leadership for instructional staff.

Start-Up

The PIP was to be sent to a project director in a suitable school district whose management style was compatible with that reflected in the package. It was to arrive between three and seven months before the start of the next school year, depending on which project was selected. The Catch-Up calendar began in March and the PTR calendar began in June. Although the start-up phase had extended over several years at some of the original sites, a synthetic start-up process was created for each project. The time period of three through seven months was considered sufficient for installation in a new site if the new site could benefit from the original mistakes, adjustments, and changes without having to experience them. The PIPs specified how to accomplish the installation so that a successful project could be implemented within a year. Thus, it was assumed that if project directors read and used the PIP appropriately during the start-up stage, they would accomplish the following tasks according to the specified time schedule:

- Hire appropriately qualified staff.
- Train staff adequately for the instructional program.
- Order appropriate materials.
- Encourage supportive attitudes and cooperation on the part of project and nonproject administrative and instructional staff.
- Obtain appropriate facilities, equipment, and materials.
- Select appropriate students.
- Make appropriate logistical arrangements, including scheduling.
- Inform community of project and develop favorable public relations.

Operations

Having performed the start-up activities appropriately the project staff can implement the instructional program described in the PIP and continue to maintain and improve the project through in-service training, maintenance of smooth working relations with other school and district staff, and continued development of parental involvement and acceptance in the community.

The Replication Principle

The most basic concept underlying the PIP mechanism is the replication principle. It is a basic tenet of science that if the sufficient conditions for an event are repeated, the event will occur again. No one can argue with the replication principle in its abstract form. If the originally effective program were duplicated exactly, the same results would undoubtedly occur.

Although RMC was aware that no two sites are exactly alike and no group of people will act and experience things exactly like another, their packages were based on the theory that, if used appropriately, the PIP would bring about appropriate actions on the part of the appropriate set of educators and thus the sufficient instructional conditions would be provided and would bring about the same amount of student learning as occurred in the original site. That is, if the exemplary project is installed and established as specified in an appropriate new site, then the essential program features and the set of original learning conditions will be replicated and the original results will naturally follow.

III DESCRIPTION OF THE PIP EVALUATION

Field Test of PIPs

For FY 1975, OPBE and the USOE Division of Supplementary Centers and Services decided to try out the new PIP dissemination concept under Section 306 of Title III of the ESEA.*

In February 1974, while RMC was developing the PIPs, the Title III program office announced the availability of four types of grants under Section 306 and sent application requirements to all school districts. The announcement of Title III grants contained no information about the six PIP programs except that they were reading and math programs for disadvantaged elementary and secondary students. Although RMC had sent to OPBE some of the information LEAs would need to select a program suited to their needs, they had not yet put information about all of the six PIP programs into a brochure. (A prototype ASK did not become available until the fall of 1974.)

After a joint review of applications by Title III program officers, OPBE staff, and consultants, 21 PIP grants were awarded. One school district, which received grants for both the PTR and the HIT PIPs, returned the award after its Board of Education refused to approve participation in the program.

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*Under Title III, funds are appropriated for "supplementary educational centers and services, to stimulate and assist in the provision of vitally needed educational services not available in sufficient quantity or quality [and in the] establishment of exemplary elementary and secondary school educational programs to serve as models for regular school programs." Eighty-five percent of the funds appropriated by Congress under Title III are awarded on a formula basis directly to the States and Territories for their administration. Under Section 306 of Title III, the remaining 15% of the funds are used each year at the Commissioner of Education's discretion for direct grants to LEAs applying for specific projects.

Seventeen school districts participated as field-test sites in the first field test of the PIPs. Since two of these districts had been assigned two PIPs each, there were 19 projects in all. The school districts participating in the field test of PIPs are:

- Lakeside Public Schools, Lake Village, Arkansas.
- Brookport School District, Brookport, Illinois.
- District No. 100, Wayne City, Illinois.
- Monroe County Community Schools, Bloomington, Indiana.
- Benton Harbor Area Schools, Benton Harbor, Michigan.
- Canton Public Schools, Canton, Mississippi.
- Holmes County School District, Lexington, Mississippi.
- City School District of Olean, Olean, New York.
- Gloversville Enlarged School District, Gloversville, New York.
- Schenectady City School District, Schenectady, New York.
- Charlotte-Mecklenburg Schools, Charlotte, North Carolina.
- Cleveland Public Schools, Cleveland, Ohio.
- Lorain City Schools, Lorain, Ohio.
- Oklahoma City Public Schools, Oklahoma City, Oklahoma.
- Dallas Independent School District, Dallas, Texas.
- Galax City Public Schools, Galax, Virginia.
- New Kent County Public Schools, Providence Forge, Virginia.

Purpose of Evaluation

OPBE's role is to evaluate the programs sponsored by USOE and to make plans and budgets on the basis of the findings. OPBE also evaluates new ideas and programs and proposes them for either legislative action or implementation by bureaus with existing legislative authority.

The field test of the six PIPs represented an opportunity for OPBE to test the PIPs in school districts, and evaluate the viability of the PIP concept and the six PIPs themselves as a method for USOE to use to disseminate programs that would improve the reading and mathematical skills of disadvantaged children. OPBE called for a "comprehensive portrayal and analysis of the process" from which to decide whether to continue, terminate, or modify the six PIPs and the packaging concept.

If, on the basis of an evaluation of the field test, reasonable ways could be found to revise and thereby improve both the PIP concept and the individual PIPs, then USOE would consider both viable. If the PIPs were deemed viable, USOE would disseminate them through either current program authorities, a newly formed dissemination program, or without federal support for anything but their development, that is, USOE would put them "on the stump."

Evaluation Questions

For OPBE to justify further USOE development or support of PIPs it was necessary to obtain answers to the following questions:

(1) Are LEAs motivated to adopt a packaged program and select an appropriate one for replication?

(2) Can the effective exemplary programs be replicated in the new sites via the PIPs?

(3) For what functions and in what amount is technical assistance required?

(4) Are the programs implemented on the basis of the PIPs as effective in improving student achievement as the original, exemplary programs?

(5) What are the effects of the programs on student attitudes?

(6) Are PIP projects acceptable to LEA staff, and to teachers, parents, and the community?

OPBE issued a request for evaluation proposals and, in June 1974, while LEAs and the Title III program officers were negotiating Title III grants for inclusion in the PIP field test, SRI enetered into a contract with USOE to evaluate the PIP concept by answering the questions listed above. SRI subcontracted with RMC for a formative evaluation of the six packages and a resource/cost analysis of the 19 field-test projects.*

In designing our evaluation strategy we became immediately aware of two problems. First, the ASK was not yet available and thus could not be used. Therefore the selection/adoption processes intended by RMC could not be directly investigated in the field test.† In evaluating the selection/adoption stage, it was necessary to document events in the field-test sites retrospectively and then make judgments about whether the ASK would have made events in the selection/adoption stage closer to RMC expectations.

Second, it was not possible to investigate replication of the exemplary program directly because the original programs no longer existed. Even if we were to visit the original site and compare its current program with the programs in the field-test sites it would not be possible to measure replication, since the program in the original site had changed in the two years since it had been validated as effective by RMC.

In addition, replication would, at best, have meaning only in the operations stage. The original sites had initiated their own projects and thus there was never a PIP selection/adoption process for them. Also, the start-up process presented in the PIP was not the same process the original sites went through. The PIPs describe a start-up process which takes advantage of the original sites' experiences. It is a more efficient start-up process organized to fit into a three-to-seven-month period. Thus, SRI's evaluation could not investigate replication per se but could study implementation of the PIP specifications, including the implementation of the instructional program modeled after the original exemplary program.

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*Volumes II and III report, respectively, RMC's recommended revisions of the PIPs and the costs of the 19 field-test projects.

†Nor was it possible for USOE to consider funding new sites in the second year of the field test to permit a field test of the ASK.

We approached USOE's question "Is the packaging of successful projects a viable way to improve the reading and mathematical skills of disadvantaged children?" by conducting two separate studies in two separate years.

In the first year of the field test, we emphasized in our evaluation the viability of the PIPs as a means of promoting the implementation of the exemplary programs in new sites. In the second year, we will focus on whether the new PIP projects effectively improved the achievement and attitudes of participating students. We conducted minimal pre- and post-testing of student achievement and attitudes during the first year to obtain some check on student outcomes in case a second-year evaluation was not possible (i.e., if there was no second year of the field test and USOE did not exercise the option to renew the evaluation contract) or the implementation year was disruptive in terms of student achievement and attitudes.

Evaluation Design

Our evaluation strategy was to compare what was expected with what actually occurred at the project level and to generalize across projects to the PIP level and the PIP concept level. Figure 2 shows these three levels of the evaluation and the number of cases from which to generalize

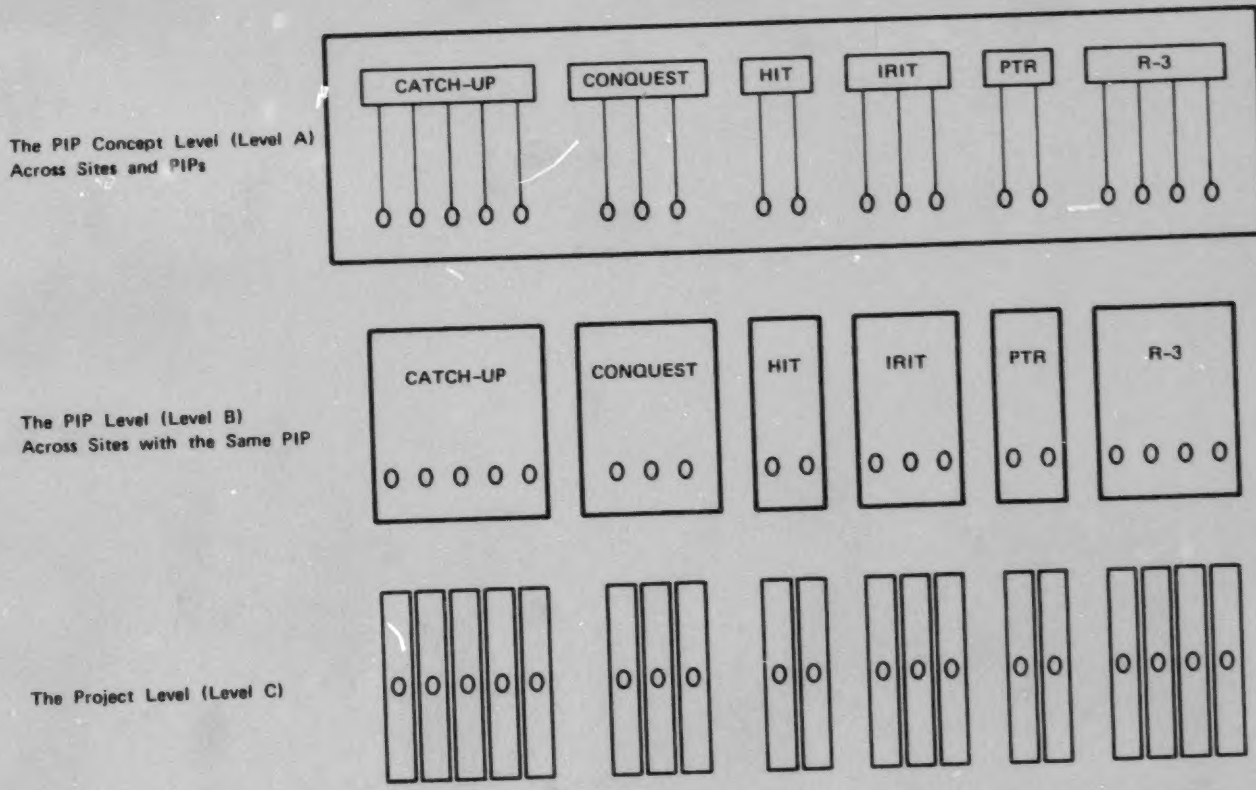

The PIP Concept Level (Level A)
Across Sites and PIPs
CATCH-UP
CONQUEST
HIT
IRIT
PTR
R-3
The PIP Level (Level B)
Across Sites with the Same PIP
CATCH-UP
CONQUEST
HIT
IRIT
PTR
R-3
The Project Level (Level C)

FIGURE 2 LEVELS OF THE PIP EVALUATION

at each level. We describe the three levels in increasing order of generality as:

(1) The Project Level (Level C)--There are 19 projects in the field test in 17 different LEAs. Data were collected at the level of the individual projects. We investigated the use of a particular PIP to install and operate a program in a particular site and compared the actual events with PIP specifications.

(2) The PIP Level (Level B)--The number of sites using each PIP ranged from PTR and HIT, with only two projects each, to Catch-Up, with five project sites. Data were summarized across sites using the same PIP for generalizations about whether PIP specifications could be followed.

(3) The PIP Concept Level (Level A)--Data were summarized across all six PIPs in use at 19 project sites to answer questions about the viability of the PIP concept.

As stated in Chapter I, we use the evaluation results in this volume as a basis for advising USOE on the viability not only of PIPs but also of packaging in general. As indicated in Figure 2, there is only one packaging concept under study--the PIP concept. However, the principles and assumptions of the PIP concept are examined for soundness on the basis of the findings across PIP sites. If, for those principles and assumptions that prove unsound, we can propose alternatives that appear likely to be successful, then the concept of packaging may be viable even if these PIPs are not. The last [redacted] chapter of this report goes beyond the data to this policy level. Although comparisons among alternative dissemination strategies are not included, we feel that some legitimate generalization about the viability of packaging can be made on the basis of the field test experience with PIPs.

To guide the data collection, we created an implementation model describing the factors that were expected to interact across the implementation stages. This model, which goes beyond the PIP concept itself to include factors other than the packages and the LEAs, is shown in Figure 3. To obtain information pertinent to all evaluation questions posed by USOE we defined six variables:

- Replications
- Nonreplications (deviations, modifications)
- Problems
- Positive and negative impacts
- Acceptability
- Cost.

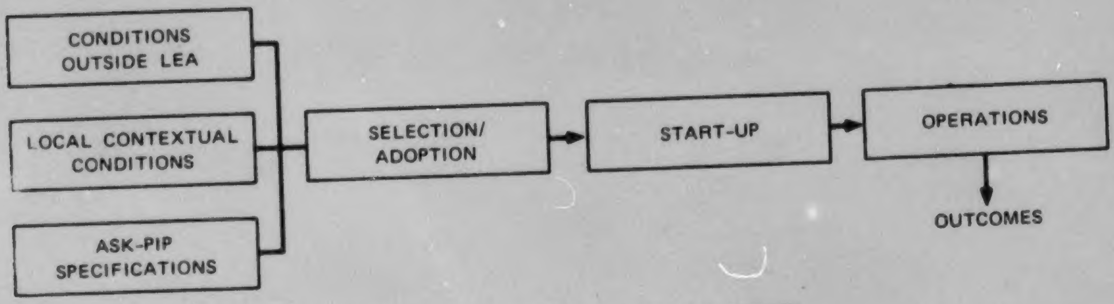

CONDITIONS OUTSIDE LEA
LOCAL CONTEXTUAL CONDITIONS
ASK-PIP SPECIFICATIONS
SELECTION/ ADOPTION
START-UP
OPERATIONS
OUTCOMES

FIGURE 3 PIP IMPLEMENTATION MODEL

These variables were defined as follows:

> Replications--A PIP replication is said to occur when any clear specification in the PIP has been carried out in the field-test site.
>
> Nonreplications (Modifications and Deviations)--A modification is defined as a local variation from an explicit PIP specification that avoids or resolves a problem which would occur if the explicit specification were followed. A deviation is an (apparently) arbitrary local variation of some explicit PIP specification.

Problems--Problems are defined as difficulties perceived by local staff in implementing the PIP project in their site.

Positive and Negative Impacts--Impacts are defined as effects of the presence of packages or projects in the school or district. Impacts include effects not only on student attitudes or achievements but also on parents, administrative staff, and project teachers (e.g., program experience has increased teacher's professional competence).

Acceptability--This variable refers to stakeholder attitudes and opinions regarding the attractiveness, value, desirability, and so forth, of the package and project.

Cost was investigated by a group of resource-cost analysts from RMC (see Volume III).

Data Collection Strategy

The major data collection strategy was to visit the sites throughout the year at critical stages to observe the projects and interview project and nonproject personnel involved in implementation.

Assuming that PIPs would be implemented more or less on schedule, we planned to visit each site (1) soon after receipt of the packages, (2) near the end of the start-up stage, (3) after instruction was well under way, and (4) near the end of the year. Besides intensive, site-and-PIP specific interviews we administered other major data collection instruments and utilized other sources of data. These were:

- PIP Grant Applications--Documents submitted by LEAs to the Title III program office during selection/adoption stage.
- Contact Reports--Forms designed by SRI and used throughout the year by field-test project, original project, and government and evaluation staffs to report telephone conversations, visits, and other contacts where assistance or clarification was requested, offered, or obtained.
- Student Pre- and Post-Measurements--Both standardized achievement tests and attitude surveys administered to participating students to measure program impact.

- Instructional Staff Questionnaires (ISQ) and Administrative Staff Questionnaires (ASQ)--Designed by SRI to measure staff attitudes toward PIP and project.
- Interviews of Federal Officials--Informal interviews in August regarding selection/adoption processes.
- Observation Instruments--Designed by SRI to observe degree of implementation of instructional program and environment.
- Informal Contacts with Parents--In-person or telephone conversations with parents of project participants.
- Resource/Cost Questionnaires--Reported in Volume III.

The schedule of data collection is shown in Figure 4. In the following sections we describe the site visit procedures and briefly explain our contact reports, questionnaires (ISQ and ASQ), and observation instruments. Then we describe pupil testing and attitude survey procedures and instruments.

Site Visits

Staffing and Training

The basic data collection unit was a team made up of two or three people, depending on specific task requirements. Each team was directed by an SRI staff member and most often included an RMC staff member. The SRI staff member directed all data collection activities at his assigned sites during the year, but was supported by other team members. Each of the six SRI field staff members was primarily responsible for one of the six PIPs with secondary responsibility for one other PIP.

RMC staff were generally assigned to sites implementing the specific packages they helped develop, but cross-PIP exposure was scheduled to ensure continuity of general categories of questions and procedures across PIPs.

SITE VISIT	1	2	3	4		5
DATE OF VISIT	AUGUST*	SEPTEMBER	OCTOBER	FEBRUARY	↓	APRIL
DATA COLLECTION ACTIVITIES	• Interviews with LEA administrators • Interviews with federal officials regarding selection/adoption process • Title III grant proposals obtained	• Interviews with project staff to assess the start-up process • Pretesting at PTR sites	• Pretesting to obtain baseline achievement and affect data • Interviews with project staff to assess the start-up process	• Observation instruments to assess the instructional process • Informal contacts with parents • Administrative and instructional staff questionnaires sent to sites • Interviews with project staff to assess operational processes	• Resource/Cost Questionnaire administered	• Posttesting (including student attitude questionnaire) • Interviews with project staff

*Contact reports and site/community descriptors were obtained throughout the data collection period.

FIGURE 4 SCHEDULE OF DATA COLLECTION

For each project, an assistant was hired locally. The site assistants served as liaisons between the evaluators and the school district and handled the logistics for on-site testing, observing, and interviewing. The student testing aspect of the study created the heaviest demands on the site assistant. The site assistant was hired, trained on site, and supervised by SRI personnel.

Preparation and training for SRI and RMC field staff was conducted at SRI throughout the year. Interview categories were established in which site-specific questions were formulated and formal procedures for data collection were developed to meet specific requirements for each site visit. At the PTR sites, local people were hired and trained on site to administer the tests.

Site Visit Schedule

Five site visits were scheduled during the year to coincide with critical points in the overall implementation process.

Site Visit 1: Collection of Data Related to Selection/Adoption--During this visit in August 1974 SRI established first contact with administrative staff in the field-test sites and introduced SRI's role in the evaluation. At the same time SRI gathered data related to the selection/adoption stage by means of loosely structured interview guides. Primary contact was with district personnel responsible for obtaining Title III grants and sometimes with staff who would lead the project.

An SRI-RMC team also interviewed program officers from the Title III office and OPBE who were responsible for assignment of PIPs to sites. Title III grant proposals were obtained.

Site Visit 2: Collection of Data Related to Start-Up--This visit, conducted from September 9 to September 20, focused on project start-up activities. Data collection methods included in-depth interviews with project directors and key project staff, and completion of checklists. Some site-specific documents related to the selection/adoption and start-up procedures were obtained.

Site assistants were hired during this visit and were given a procedures manual, which outlined their responsibilities, and general training by the site visitor.

Although interview questions were necessarily specific to PIPs and sites, interview guides were prepared prior to the visits on the basis of common categories. Start-up activities were divided into (1) recruiting and hiring staff, (2) preservice training, (3) orientation and public relations, (4) student selection and scheduling, (5) ordering materials and equipment, and (6) securing facilities. Within each of these categories the evaluation variables (e.g., problems, replications, impacts, acceptability) determined the nature of the questions. For any problem, negative impact, deviation, or other difficulty, interviewers pursued the source of the difficulty in terms of the implementation model. For example, difficulties in hiring might be attributed to conflicts with local administrative regulations (local context) or difficulties in ordering materials might be due to misinformation in the Hardware/Software Packet (PIP specifications).

Site Visit 3: Collection of Baseline Student Test Data--For purposes of testing PIP students, this site visit was conducted from October 12 through 25, except for PTR projects. Since a different evaluation was to be applied to PTR, testing was done in September and early October to select students for PIP project participation as well as to obtain baseline achievement data. All tests were administered by the trained SRI field staff, except for the PTR sites where, as noted earlier, locally hired and trained people administered the tests. Site assistants were trained and utilized as test monitors.

To ensure adherence to standard procedures, SRI test administrators were trained with videotapes and in classrooms and followed the guidelines in the SRI testing manuals. A testing procedures manual for site assistants, prepared and sent to them prior to the test visits, described in detail the duties to be performed before and after the test visit, as well as their function during the actual testing.

Site Visit 4: Collection of Data Related to Operations--This visit, conducted between February 10 and 21, focused on the operations stage of project activities. SRI site visitors utilized the observation instrument to make scheduled observations of the instructional program. They also met with local personnel to discuss various aspects of project operations relevant to the study. Interview categories included staff roles, in-service training, project/nonproject staff interaction and communication, parent involvement and other community relations, utilization of resources, instructional methods, and pupil progress. Informal contacts were made with some parents at meetings in the schools or through telephone calls to "get a reading" on parent and community knowledge of and attitudes toward the project.

For a few of the larger sites a second SRI team joined the first SRI-RMC team on site visit 4 to cover the scheduled number of observations and interviews.

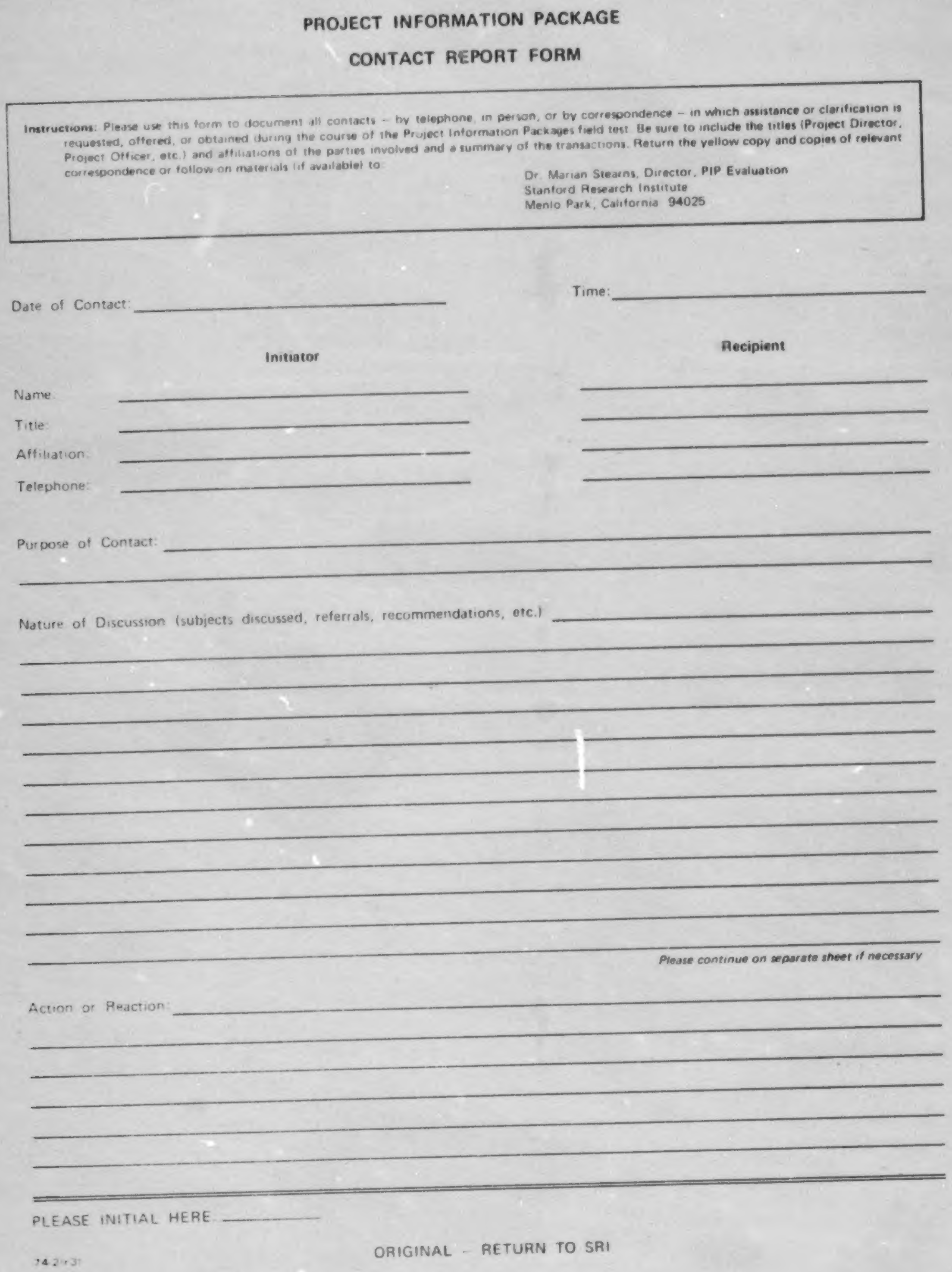
Site Visit 5: Collection of Student Achievement and Attitude Posttest Data--Site visit 5 was conducted between April 7 and 25 and was scheduled to posttest PIP students to assess their achievement and attitude changes during the project. Just prior to the visit RMC cost analysts had administered the resource/cost questionnaires in person at each site. During the April visit, in addition to test administration, site visitors met with local project staff to discuss remaining questions about selection/adoption, start-up, and operations stages, and questions about technical assistance needs and utilization. Follow-up on nonrespondents to the ASQ and ISQ was conducted. Progress in formulating plans for next year's activities was also explored.

Contact Reports

To trace requests for technical assistance and the influence of the evaluators and the government on implementation, contact report forms (see Figure 5) and instructions were developed and distributed to all field-test project directors, Title III and OPBE program officers involved in the field test, all SRI and RMC evaluation staff members, and project directors in all original program sites. The latter were given an honorarium for submitting these reports. The reports were received at SRI throughout the year and were coded by stage, subject matter, initiator, recipient, and the like.

Administrative and Instructional Staff Questionnaires

A large-scale assessment of local staff attitudes about and perceptions of the packages and the projects was undertaken in February 1975. Fielding of this survey involved mailing questionnaires to all local project staff and a selected sample of other local instructional and administrative staff. Two separate questionnaires were distributed. The first was an instructional staff questionnaire mailed to project teachers, aides, adult tutors, and to nonproject teachers and aides based in targeted schools. The sample for the administrative staff



PROJECT INFORMATION PACKAGE

CONTACT REPORT FORM

Instructions: Please use this form to document all contacts — by telephone, in person, or by correspondence — in which assistance or clarification is requested, offered, or obtained during the course of the Project Information Packages field test. Be sure to include the titles (Project Director, Project Officer, etc.) and affiliations of the parties involved and a summary of the transactions. Return the yellow copy and copies of relevant correspondence or follow-on materials (if available) to:

Dr. Marian Stearns, Director, PIP Evaluation
Stanford Research Institute
Menlo Park, California 94025

Date of Contact: ______________________ Time: ______________________

	Initiator	**Recipient**
Name:		
Title:		
Affiliation:		
Telephone:		

Purpose of Contact: ______________________

Nature of Discussion (subjects discussed, referrals, recommendations, etc.) ______________________

Please continue on separate sheet if necessary

Action or Reaction: ______________________

PLEASE INITIAL HERE ____________

74-2(r3)

ORIGINAL – RETURN TO SRI

FIGURE 5 PIP CONTACT REPORT FORM

questionnaire included local project directors, their secretaries or assistants, district personnel (e.g., superintendents, reading coordinators, federal project directors, local evaluation personnel) and principals and other school administrative personnel, such as counselors and psychologists.

During a series of visits to a small group of field-test projects in October 1974 a survey methodology was developed and items for inclusion in the questionnaire were identified. As a result of these visits, items were organized around such issues as respondent's familiarity with the PIP and the project, problems encountered or anticipated in implementation, techniques used to inform various community groups about the project, positive and negative impacts perceived to date, respondent attitudes toward the projects, and assessment of the packages used in their schools. A combination of structured and free-response items appeared on the two questionnaires. A sample page from the ISQ is shown as Figure 6.

Final selection of the sample was accomplished by SRI evaluation staff with the help of lists prepared by the local site assistants. Specific criteria for inclusion in the samples were as follows:

- Administrative Staff Questionnaire--All administrative staff fully or partially paid out of PIP funds; other administrative staff involved in or affected by PIP projects (including, wherever possible, authors of the original grant applications); total population for the administrative staff questionnaire was 192. All were included as questionnaire respondents.
- Instructional Staff Questionnaire--All adult staff directly involved in PIP project instruction; nonproject teachers and aides with pupils who were participating in one of the PIP projects (at the larger sites 25 nonproject respondents were selected on the basis of a stratified teacher/aide random sample); total sample for the instructional staff questionnaire was 517.

69. Suppose that personnel in other districts wanted to set up a project like your school's PIP project. If visits to your school or some other school in which the project was already operating were possible, when would they be most useful? Please assign the most useful time for a visit a "1", the second most useful time a "2", the third most useful time a "3", and the least useful time a "4".

Prior to deciding to set up the project ____

During preliminary planning — i.e., determining objectives; identifying resources needed (staff, materials equipment) ____

During project start-up — i.e., obtaining resources, selecting students for participation, training staff ____

During project operations — i.e., once the instructional phase of the project was underway ____

70. What other forms of assistance (consultants, etc.) would be needed by personnel in another district if they wanted to set up a project similar to yours?

71. If your school's PIP was widely available (i.e., to other schools in your district or to other districts), would you recommend it to your colleagues?

____ Definitely yes

____ Probably yes

____ Undecided

____ Probably no

____ Definitely no

72. Are you familiar with other PIPs?

____ Yes

____ No (If No, please go on to Question 75)

FIGURE 6 SAMPLE PAGE FROM THE INSTRUCTIONAL STAFF QUESTIONNAIRE

Respondents were eligible for a $10.00 honorarium for their participation. Return rates were relatively high. The number of ASQs processed was 160; the number of ISQs, 431. Both figures represent return rates of just over 83%. Rates of 80% or better on the ISQ were achieved for 11 of the 19 sites; on the ASQ, rates of 80% or more were received from 14 sites. In several places 100% return rates were achieved on the ASQ, mostly at sites where the Catch-Up and R-3 projects were implemented in a single school.

Observation Instrument

The observation instrument was our principal method of determining whether field-test sites had reproduced the specified program features in the instructional environment.

The methodology developed and employed to establish evidence of instructional program implementation at the operations stage involved six observation instruments and a set of systematic procedures for quantifying both common and PIP-specific aspects of program implementation.

The basic observation instruments consisted of sequences of checklist and rating-scale items. Checklist items required primarily low-inference "presence-absence" responses from observers and were directed toward the presence of materials or resources or the occurrence of specified procedures. Rating-scale items were of somewhat higher inference and required observer judgments on qualitative and quantitative aspects of the instructional environment and observed procedures.

The instrument was designed to develop three types of implementation evidence: (1) instructional resources and facilities, (2) instructional activities, and (3) observer summary judgments regarding the use (or occurrence) of PIP-specified materials and procedures. Items pertaining to resources and facilities were grouped in one section of the instrument, those focusing on instructional activities and methods in another section, and judgments on the use of PIP-specified materials and procedures in a third section. The second section of the instrument was designed to be used over several instructional periods. When combined in appropriate quantities, that is, one each of sections (1) and (3) and two or more of section (2), the three sections constitute a single instrument for each PIP. The resultant form is an observation schedule for a given observation session. Observers were trained in the use of this observation form, in code definitions, and in the methods to be employed in the field.

Our observation procedure involved the use of two-member observation teams so that each PIP instructional center (or lab or classroom where the project was being implemented) was observed by the team on two separate occasions. Although each team member compiled his implementation ratings independently, observation schedules were synchronized with respect to time segments and observation focus within each classroom or center.

The schedules followed by the observers specified that for each observation session, information on resources and materials was to be completed first, followed by two (or more) synchronized 10-minute time samples or "episodes" of instructor/pupil activities and then by summary ratings on the overall quality and degree of implementations of certain specified PIP methods and procedures.*

The observation procedure was designed to assure that two independent records of PIP instructional program implementation would emerge (one from each team member, synchronized to focus on the same phenomena) and that protocols would be obtained at least twice from each center (or lab or classroom). This procedure effectively reduced the likelihood of producing data seriously biased by observer, temporal, or site-sampling errors.

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*The degree of specificity varies somewhat from PIP to PIP, resulting in corresponding variability in these summary scales.

Student Achievement Tests

Although our primary concern in the first-year evaluation was whether projects were implemented on the basis of PIPs, we nevertheless considered it useful to evaluate the impact of the instructional programs on students during the implementation year. We could determine whether the progra[illegible] in their first year had any negative effects on the students' self-concepts and their attitudes toward school and possibly detect what the effects of the fully implemented program on achievement test results were likely to be. Furthermore, problems in analysis methodology could be worked out during the first year on a trial-run basis for the second year when student outcomes are to be the focus of evaluation.

As soon as the Title III grants were awarded for participation in the field test, it was apparent that most LEAs could not provide reasonable control groups for evaluation purposes. A number of sites were too small to allow for random assignment of students to treatment and control groups. In one Catch-Up site, for example, 64 of the 84 children in the attendance area participated in the project. Children attending school in the nearby town would not have made a comparable control group; they would have confounded the interpretation of results with additional variables rather than representing the control condition. In only one site were children randomly assigned to a non-PIP group. Results from this non-PIP group would serve as estimates of results of the project-participant group had they not received the PIP treatment. But in all other sites such control groups could not be made available.

In 17 of the field-test projects we applied the norm referenced design described by RMC for use in evaluating programs.* In evaluating the original exemplary programs RMC had to rely on whatever data was made available; they attempted to apply the "one-third SD over expected gain" criterion on whatever standardized test data was available at the original sites. But original projects did not always meet conditions RMC considered appropriate for standardized test evaluation. The design we employed was actually an improved version described by RMC on the basis of experiences in the search for exemplary programs. In this design mean pre- and post-test scores of students exposed to a PIP program were compared with the norms of the standardized tests these students had taken. Thus, the norm group became the comparison group. Testing was conducted at the same times of year that the standardization groups had been tested to increase the validity of comparison.

The PTR sites were excepted from this design. Because the PTR program specified that all students below a certain cutoff score on the pretest be included in the project and all students above a certain cutoff score be excluded, an alternative evaluation design was chosen for PTR projects. In the manual prepared on the basis of experiences in identifying exemplary programs, RMC described regression discontinuity and regression progression designs that use nonparticipants scoring above the cutoff point as the comparison group (the regression line of the comparison group represents "expected gains" for the project participants). These were the designs by which PTR student outcomes were evaluated.

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*Horst, D. P., G. Tallmadge, and C. Wood, "A Practical Guide to Measuring Project Impact on Student Achievement," U.S. Department of Health, Education, and Welfare, Office of Education, Washington, D.C. (1975).

Since we were eventually supposed to determine whether or not replication of the exemplary program at a new site resulted in student outcomes of the same magnitude, we could have measured each project by the same instruments and with the same procedures as those used in the exemplary site. There were trade-offs involved, however. Because RMC had reported finding that the evaluation data for the exemplary programs were problematic, we did not think it appropriate to repeat some earlier mistakes and poor evaluation practices for the sake of consistency between exemplary and field-test site evaluations. In addition, USOE requested that all PIPs be evaluated against a national norm group on a standardized test.

It appeared best to use a single set of standardized tests across all projects to which the same evaluation design could be applied. The Metropolitan Achievement Test (MAT) (1970) Form F,* was chosen because of its standardization across all grades covered by PIP projects and because many of its properties are known and available in reports. For all field-test projects except PTR projects, Metropolitan Achievement tests were administered in October and April to correspond to the times when tests were administered to the norm groups.

The Metropolitan Achievement Test

Table 3 compares the test levels employed by SRI with those recommended by the publishers of the MAT. It can be seen that the test administered in the fall was generally one or two grade levels lower than recommended. The lower grade level tests were administered to prevent participants in PIP projects, who were selected for their low reading ability, from "bottoming out" on the tests, and thereby avoid an invalid

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*Form G was administered to IRIT third and fourth grade students to correspond to local testing plans.

Table 3

MAT TEST SERIES

Grade	Test Employed		Test Recommended	
	Fall	Spring	Fall	Spring
1	Murphy-Durrell (Faces)*	Primer (Faces)	Primer	Primary I
2	Primary I (Faces)	Primary I (Faces)	Primary I	Primary II
3	Primary I (Coopersmith)	Primary II (Coopersmith)	Primary II	Elementary
4	Primary II (Coopersmith)	Elementary (Coopersmith)	Elementary	Elementary
5	Elementary (Coopersmith)	Elementary (Coopersmith)	Intermediate	Intermediate
6	Elementary (Coopersmith)	Elementary (Coopersmith)	Intermediate	Intermediate
7	Intermediate (Coopersmith)	Intermediate (Coopersmith)	Advanced	Advanced

*Tests in parentheses are affective tests.

baseline from which to judge their progress. In the spring, the test level was adjusted upward for those groups in which a number of children had achieved nearly top scores in the fall.

The MAT comprises a battery of standardized tests designed to cover a variety of subject areas. These tests are particularly suited to the evaluation of educational innovations because of the standard scores which have been created to permit interpretation across grades. Standard score conversion tables were available for all five levels of the battery used in the PIP evaluation.

MAT Primer--The MAT Primer was given in the spring to first grade children in the study. The primer is composed of three subtests: Listening for Sounds, Reading, and Numbers. The Numbers test was not applicable to PTR, which is a reading program, and was therefore not administered.

The Listening for Sounds subtest contains 39 items. Twenty-two items require the child to match a sound spoken by the tester with a picture of an object whose name begins or ends with that sound. Eight items require the child to match a sound with a written letter, and 9 items require the child to match a spoken word with a written word.

The Reading subtest consists of 33 items. In 11 items the child must select a letter that the tester has said aloud from a group of four letters. Seventeen items require the child to select the word which "best tells" about a picture. The remaining five items require the child to select which of three sentences best describes a picture.

MAT Primary I--The Primary I was given to second grade students during the fall and spring and to third grade students in the fall. This test consists of four subtests: Mathematics, Word Knowledge, Word Analysis, and Reading. A total reading score is derived from the Word Knowledge and Reading subtests; therefore, the Word Analysis subtest was not given. The Mathematics subtest was given only in those projects and to those students as appropriate.

The Word Knowledge subtest consists of 35 items where the child is required to select from among four words the one word that best describes a picture.

The Reading subtest has two parts consisting of 13 and 29 items, respectively. In the first part of the subtest the student selects one of three sentences that best describes a picture. In the second he reads simple paragraphs and answers questions about them.

The Mathematics subtest is also divided into two parts. The first part examines the student's understanding of counting, shapes, relative terms such as "larger," the value of coins, and his ability to tell time. The second subtest tests the student's ability to add and subtract one- and two-digit numbers.

MAT Primary II--The MAT Primary II consists of seven subtests, five of which were administered to the PIP students. The mathematics subtests were not given to pupils in the Conquest or IRIT projects, since these PIPs are reading programs.

The Word Knowledge subtest consists of 40 items. The first 17 require the student to select from four words the one that best describes a picture. The remaining items require the student to identify synonyms and antonyms.

The Reading subtest is also divided into two parts. It is a slightly more advanced version of the subtest of the same name in the MAT Primary I.

Mathematics Computation is a subtest of 33 items requiring the student to add one- and two-digit numbers, with two and three addends, multiply one-digit numbers, as well as solve some "missing addend" problems.

The Mathematics Concepts subtest, as in the Primary I, requires the student to use such ideas as "most," "largest," and "nearest." There are also items that test the students ability to tell time and read calendars.

The Mathematics Problem Solving subtest consists of 35 items, about one-half of which are dictated by the tester. All items are simple word problems, with the exception of three that instead require identifying the method of solution.

MAT Elementary--The MAT Elementary was administered to the fourth grade during the spring and to the fifth and sixth grades during both the fall and spring. Like the Primary II, this MAT consists of seven subtests, five of which were administered to the PIP pupils.

The Word Knowledge subtest contains 50 items requiring the student to identify synonyms or antonyms.

The Reading subtest is made up of 45 items requiring the student to draw inferences, identify main ideas, and determine word meanings from context. The questions are in paragraph format.

Mathematics Computation is a subtest of 40 items which require the student to perform addition, multiplication, and division. Seven items require the manipulation of decimals and fractions.

The Mathematics Concepts subtest contains 40 items that attempt to assess the student's understanding of basic mathematical principles and geometry.

The Mathematics Problem Solving subtest consists of 35 mathematics word problems.

MAT Intermediate--The MAT Intermediate was given during the fall and spring to students in the seventh grade. The format of the MAT Intermediate is parallel to that of the MAT Elementary, but the items are somewhat more difficult.

The Murphy-Durrell Reading Readiness Analysis

This standardized test was given to PTR students in September as they entered the first grade to provide project staff with a basis for selecting students for project participation. The Murphy-Durrell test is recommended primarily for grouping first grade students by class or within a class for instructional purposes and for determining the degree of reading readiness of groups or individuals. The test is composed of three subtests: The Phonemes test, the Letter Names test, and the Learning Rate test.

The Phonemes test provides an inventory of the child's ability to identify sounds in spoken words. There are 24 items that require the child to mark two pictures that represent words which start or end with a sound dictated by the tester.

The Letter Names test consists of 52 items that measure the child's ability to identify capital and lower case letter names read by the tester.

The Learning Rate test measures how many of 18 words a child can recognize one hour after a formal instructional presentation of the words.

The PIP analyses only employ the total test scores. PTR participants were posttested in April with the MAT Primer.

Student Attitude Inventories

For the measurement of student attitudes toward self, home, and school, the Faces Attitude Inventory was selected for first and second grades and the Coopersmith Self-Esteem Inventory was selected for the higher grade levels. These were administered along with the pre- and post-test achievement battery.

Since all but one of the PIP projects were "pull-out" projects, that is, they required participants to leave their regular classrooms, and since each of the instructional programs had unique aspects not used in regular classroom practice, it seemed appropriate to determine the impact of these special features on participating students. PIP-specific attitude questionnaires were designed to determine (1) whether any stigma was attached to a child who left his regular classroom to attend the PIP project, (2) whether the child's PIP participation was upsetting or pleasant and, (3) what was the child's perception of his parents' attitudes toward his participation in the project. The PIP-specific attitude questionnaires were administered with the posttest battery only.

Faces Attitude Inventory

The item format of the Faces is a picture that represents the concept being assessed; there are three schematic faces below the picture, representing a "happy," "sad," or "so-so" face. The child marks one of these faces according to his feelings regarding the concept. For example, the tester reads the statement: "Here is a picture about coming to school in the morning. Put a cross through the face that shows how you feel about coming to school in the morning." If the child marks the happy face below, this is scored as evidence of a positive attitude toward school. Other items assess how the child feels about his teacher, his peers, his name, clothes, and appearance. The test items are read aloud by the tester.

The version of the Faces used in the PIP evaluation has 16 items, the first two of which are practice items assessing the child's attitude toward "having fun," and "falling down and hurting yourself." These items are scored separately as indicators of the child's understanding of the appropriate response mode and thus the reliability of the child's responses.

Coopersmith Self-Esteem Inventory

The adaptation of the Coopersmith used for the PIP evaluation is composed of 58 items, 7 of which are scored separately and interpreted as a "truth" scale. Examples of "truth"-scale items are "I never worry about anything" and "I always do the right thing." Students who say that these characteristics are "not like me" are considered to be responding openly. The scale is scored such that a high score represents increased openness.

The remaining items in the Coopersmith are composed of such statements as "I give in very easily" (if the response is "like me," this is scored as evidence of a negative self-image), and "I'm pretty happy" (if "like me," this is scored as evidence of a positive self-image). The test items are read aloud by the tester.

PIP-Specific Student Attitude Questionnaires

The Faces and Coopersmith formats were adapted to assess student feelings toward the PIP projects. There were six different test instruments; on each the questions were specific for one PIP. For example, Coopersmith questions were stated as "I'm reading better now since I went to the Catch-Up center" (scored positively, if answered "like me"), and "I'm sorry I had to go to the classes at the Catch-Up center" (scored negatively, if answered "like me"); Faces questions were stated as "Here is a picture of a child with a tutor. Think about having a tutor. Put a cross through the face that shows how you feel about having a tutor" (scored positively if the happy face was crossed).

All the PIP-specific Student Attitude Questionnaires were administered in the spring, immediately following the attitude inventories.

Testing Procedures

Testing procedures manuals were prepared prior to both fall and spring testing. The manuals detailed the responsibilities and duties of both the site visitors and the site assistants. Site visitors were trained at SRI before going into the field; they, in turn, trained the site assistants as test monitors to ensure that testing procedures and conditions approximated as closely as possible those described by the test authors and publishers. The tests were to be administered as consistently as possible to different groups of children both within and across projects. In some cases, minor deviations occurred, most of which were related to local scheduling requirements.

Because the PIP evaluation is concerned with fewer subject areas than the published tests, not all subtests were given. In addition, it was decided that the Reading or Word Knowledge subtests would be given first, since this would test the children at their freshest.

Table 4 shows the actual test schedule for PIP sites for fall and spring, and, for comparison purposes, includes information regarding publishers' recommendations. There was, in all cases, at least a 30-minute break between sittings. The Murphy-Durrell Learning Rate Test was administered one hour after the Teaching Exercise. There are no time limits noted in Table 4 for the Murphy-Durrell because the publisher did not provide any. However, the first and second sitting averaged 20 minutes. At the PTR sites, tests were administered to six children at a time.

In all cases, suggested administration times and procedures were followed. Practice items were done at the beginning of the first sitting.

Table 5 shows by project and subtest the number of students tested. The fall testing was conducted during October, with the exception of PTR projects, which were tested in September to allow for student selection. The spring testing was conducted in April at all projects.

The procedures manual for the site visitors and site assistants contained information on preparation for testing, and for handling and shipping completed test booklets. It gave instructions on how to maintain control during testing; administer the practice items; read test directions; pacing; how to handle disruptions and what to do if a child needed to be removed from the testing group; how to document testing conditions; monitoring duties and behavior; and collecting test booklets and providing for their security.

A procedures manual delivered to site assistants prior to testing gave instructions on how to make appropriate preparations for testing, and for handling and shipping completed test booklets. Procedures on site and at SRI were designed to protect the confidentiality of test data.

Analysis Strategy

Interview Data Analysis

During each of the five site visits, we collected data through informal interviews with teachers, aides, and administrators in the 19 projects. The interviews were organized by categories based on expected events in the selection/adoption, start-up, and operations stages (e.g., hiring, inservice training), the variable of interest (e.g., nonreplications, problems, acceptability), and the perceived sources of difficulties (e.g., conflict with local regulations, ambiguity in PIP specifications).

These directly obtained data were central to the formative and summative evaluation of PIP implementation. A systematic approach for tabulating this kind of data for each of the 19 projects was developed; a debriefing procedure and debriefing forms were used to complete this task.

Table 4

DURATION AND ORDER OF ADMINISTRATION OF PIP STUDENT OUTCOME BATTERY
(Fall and Spring)

		Day One													
		Sitting One				Sitting Two				Sitting Three					
PIP	Test Given	Order Given	Recommended Sitting	Subtest	Time (Min)	Order Given	Recommended Sitting	Subtest	Time (Min)	Order Given	Recommended Sitting	Subtest	Time (Min)	Order Given	Recommended Sitting
Catch-Up	Primary I MAT	1	3	Reading	30	1	--	Faces	15						
		2	1	Word Knowledge	15	2	4	Math Concepts	15^*						
								Math Computation	15						
	Primary II MAT	1	3	Reading	30									1	--
		2	1	Word Knowledge	18									2	5
	Elementary MAT	1	2	Reading	25	1	--	Coopersmith	15					1	6
		2	1	Word Knowledge	15	2	5	Math Computation	35					2	7
Conquest	Primary I MAT	1	2	Reading	30	1	1	Word Knowledge	15						
						2	--	Faces	15						
	Primary II MAT	1	2	Reading	30	1	1	Word Knowledge	20						
						2	--	Coopersmith	15						
	Elementary MAT	1	2	Reading	25										
		2	1	Word Knowledge	15										
		3	--	Coopersmith	15										
HIT	Elementary MAT	1	1	Word Knowledge	15	1	5	Math Computation	35	1	7	Math Problem Solving	25		
		2	2	Reading	25	2	6	Math Concepts	25	2	--	Coopersmith	15		
	Intermediate MAT	1	1	Word Knowledge	15	1	5	Math Computation	35					1	6
		2	2	Reading	25	2	--	Coopersmith	15					2	7
IRIT	Primary II MAT	1	1	Word Knowledge	12	1	--	Coopersmith	15						
		2	2	Reading	30										
	Elementary MAT	1	1	Word Knowledge	15	1	--	Coopersmith	15						
		2	2	Reading	25										
PTR	Murphy-Durrell (fall only)	1	1	Phonemes (Part I)		1	1	Phonemes (Part II)		1	1	Learning Rate Test			
		2	2	Letter Names		2	2	Learning Rate Exercise		2	--	Faces	15		
	Primer MAT (spring only)	1	1	Practice Page	10	1	3	Listening for Sounds (cont.) p. 4	5	1	--	Faces	15		
		2	2	Listening for Sounds pp. 2, 3	20	2	4 5	Reading pp. 5-7	5 15						
R-3	Intermediate MAT	1	1	Word Knowledge	15	1	5	Match Computation	35					1	6
		2	2	Reading	25									2	7

*MAT tests which are dictated by the tester. Times given are estimates, not exact time limits.

Table 4

DURATION AND ORDER OF ADMINISTRATION OF PIP STUDENT OUTCOME BATTERY
(Fall and Spring)

		Day One								Day Two							
ing		Sitting Two				Sitting Three				Sitting One				Sitting Two			
Su	Time (Min)	Order Given	Recommended Sitting	Subtest	Time (Min)	Order Given	Recommended Sitting	Subtest	Time (Min)	Order Given	Recommended Sitting	Subtest	Time (Min)	Order Given	Recommended Sitting	Subtest	Time (Min)
	30	1	--	Faces	15												
	15	2	4	Math Concepts	15*												
				Math Computation	15												
oper	30									1	--	Coopersmith	15	1	6	Math Concepts	20*
th C on	18									2	5	Math Computation	18	2	7	Math Problem Solving	25
th C	25	1	--	Coopersmith	15					1	6	Math Concepts	25				
th oble	15	2	5	Math Computation	35					2	7	Math Problem Solving	30				
	30	1	1	Word Knowledge	15												
		2	--	Faces	15												
	30	1	1	Word Knowledge	20												
		2	--	Coopersmith	15												
	25																
	15																
	15																
	15	1	5	Math Computation	35	1	7	Math Problem Solving	25								
	25	2	6	Math Concepts	25	2	--	Coopersmith	15								
th C	15	1	5	Math Computation	35					1	6	Math Concepts	25				
th oble	25	2	--	Coopersmith	15					2	7	Math Problem Solving	25				
	12	1	--	Coopersmith	15												
	30																
	15	1	--	Coopersmith	15												
	25																
		1	1	Phonemes (Part II)		1	1	Learning Rate Test									
		2	2	Learning Rate Exercise		2	--	Faces	15								
	10	1	3	Listening for Sounds (cont.) p. 4	5	1	--	Faces	15								
	20	2	4 5	Reading pp. 5-7	5 15												
h C	15	1	5	Match Computation	35					1	6	Math Concepts	25	1	--	Coopersmith	15
h ble	25									2	7	Math Problem Solving	25				

are estimates, not exact time limits.

Table 5

NUMBER OF CHILDREN TESTED IN FALL 19

	Project Number	Fall	Spring	MAT Primary I				MAT Primary II				MAT Elementary			
		Murphy-Durrell	MAT Primer	Fall		Spring		Fall		Spring		Fall		Spring	
				Reading	Math	Reading	Math	Reading	Math	Reading	Math	Reading	Math	Reading	Mat
Catch-Up	1			26	26	26	26					38	37	38	38
	2			7	8	7	8					20	19	21	23
	3			8	8	8	8	9	9	9	7	24	24	22	24
	4											31	29	31	30
	5			5	3	5	5	9	10	10	10	16	13	16	16
Conquest	1			16		15						47		46	
	2			22		21						41		44	
	3			43		45						86		[illegible]5	
HIT	1											23	23	23	23
	2														
IRIT	1							22		22		22		21	
	2							16		18		12		12	
	3							26		25		16		16	
PTR	1	146	146												
	2	219	219												
R-3	1														
	2														
	3														
	4														
Totals		365	365	127	45	127	47	82	19	84	17	376	145	375	154

Table 5

EN TESTED IN FALL 1974 AND SPRING 1975

MAT Elementary			MAT Intermediate				Faces			Coopersmith			Total Children	
l	Spring		Fall		Spring		Fall	Spring		Fall	Spring			
Math	Reading	Math	Reading	Math	Reading	Math	Booklet	Booklet	Attitude Survey	Booklet	Booklet	Attitude Survey	Fall	Spring
37	38	38					26	25	25	38	38	38	64	64
19	21	23					8	7	8	22	23	23	30	31
24	22	24					8	8	9	33	29	29	41	41
29	31	30								62	60	61	62	60
13	16	16					5	5	5	26	26	26	31	31
	46						15	15	15	47	46	46	63	61
	44						22	21	22	41	45	44	63	66
	85						43	46	46	86	83	84	129	131
23	23	23								46	46	46	46	46
			53	51	52	51				70	70	70	70	70
	21									44	43	43	44	43
	12									28	29	29	28	30
	16									42	42	42	42	42
							131	142	87				146	146
							214	214	54				219	219
			45	43	45	45				45	45	45	45	45
			52	50	52	52				52	52	51	52	52
			47	45	48	48				47	48	48	47	48
			46	44	47	46				45	46	46	46	47
145	375	154	243	233	244	242	472	483	271	774	771	771	1,268	1,273

The debriefing procedures and forms were based on the general evaluation strategy of comparing what was expected according to the PIP concept and PIP specifications with what actually happened in each field-test site. Since RMC had created an elaborate model of the inputs, processes, and outputs for each implementation stage for the interim report, the debriefing forms were based on RMC's so-called model of intentions at Level A. This model of intentions or expectations is described in Volume II and is fully rendered in Appendix C of that volume. The general conventions of the model are shown in Figure 7. Each of the expectations listed in Appendix C was printed in question form on a separate page similar to that shown in Figure 8. Under the Level A expectation, site visitors wrote the PIP-specific expectation (the Level B specifications). An entire set of forms was filled out for each project, thus permitting a comparison of events in each of the 19 projects with the intended events as specified in the PIPs and by the developers of the PIP concept.

Each debriefing form consisted of four sections. In the first section, the intended outcome or activity is stated in the form of a question at Level A. For example, a question under the outcomes section of the selection adoption stage would read: "To what extent did the project director have the appropriate PIP-specific technical qualifications?" Site visitors then filled in the Level B specifications. For example, the specification for the Conquest PIP would be: "Project director should have several years experience in teaching and diagnostic/prescriptive approach; should have administrative and supervisory experience; should have work experience within the school district and have respect of community and professionals." Level B specifications were quoted verbatim from the PIP when such specifications were available or inferred by the SRI site visitors and RMC authors when the specifications were not clear in the PIP.

	Selection/Adoption				Start-Up				Operations			
	Inputs	Processes		Outcomes	(New) Inputs	Processes		Outcomes	(New) Inputs	Processes		Outcomes
		Activities	Time			Activities	Time			Activities	Time	
Personnel Project Director Project Staff Nonproject Personnel				Roles Skills Attitudes	PIP: Information Self-training materials Job aids: PR materials Calendars Sample Forms	Establishing roles Selection Training		Roles Skills Attitudes		(Establishing roles) (Selection) Training		Roles Skills Attitudes
Other Resources Materials Facilities				Availability Adequacy Acceptability Related Systems	PIP: Information Sample materials	Selection/ Ordering Distributing/ Allocating		(Availability) Adequacy Acceptability		(Selection/ Ordering) Distributing/ Allocating		(Availability) Adequacy Acceptability
Students				Skills Attitudes	PIP: Information	(Selection)		Skills Attitudes		Selection Training		Skills Attitudes

FIGURE 7 DESCRIPTIVE MODEL OF THE PIP REPLICATION MECHANISM

SELECTION/ADOPTION—INTENDED OUTCOMES
OTHER RESOURCES—FACILITIES

LEVEL-A ITEM	RATING	EXPLANATIONS (Problems, nonreplications, impacts acceptability)	BASIS FOR STATEMENTS
A. Availability 1. Was appropriate classroom space available in district (i.e., project did not require taking teacher's lounge or kindergarten), or was portable space available for purchase?	0,1,2		
LEVEL-B ITEM Attractive, colorful labs. 1 classroom or space for a relocatable room to serve as a laboratory. District rents relocatable classroom if none is available. Room not used for other purposes.			

FIGURE 8 PIP DEBRIEFING FORM FOR INTERVIEW DATA

In the second section of the debriefing form, site visitors rated the adequacy of the implementation of the specifications in the project. The following scale was used:

2 = The task was accomplished as specified in the PIP and according to the PIP schedule.

1 = The task was accomplished but not as specified in the PIP.

0 = The task was not accomplished at all.

In the third section of the form the exact circumstances of the implementation were then explained in narrative form. Problems, impacts, nonreplications, and their sources were described. In the fourth section the site visitor noted the bases for statements made in the previous sections and listed documents (interview notes, contract reports, and the like) that supported the statements.

Site visitors had the major responsibility for completing the debriefing forms. However, any staff member who had visited or had access to information about the project assisted the site visitor by discussing the information with him or recording it on the debriefing forms.

The completed debriefing forms became a central source from which the description of events in the field test was written. In preparation of the current report, sections of the debriefing forms were grouped by stage according to the particular events to be discussed (e.g., hiring, orientation). The raw narratives were interpreted across sites within PIPs or across sites and PIPs to provide generalizations at the PIP level or the level of the PIP concept. Examples to illustrate general findings were drawn from the forms to provide as accurate a picture as possible of what was taking place in the field-test projects.

Questionnaire Data Analysis

Coding of the structured items on the ISQ and ASQ was accomplished by a group of experienced coders working with a manual containing explicit codes for each response option. Codes for the open-ended items were developed, based on review of a large sample of responses to each question, and coding was done by evaluation field staff. Once the preliminary code list had been developed, coding assignments for these open-ended questions were made by item rather than by questionnaire booklet, that is, a single coder read all booklets and coded all responses to a particular item (on both the ASQ and ISQ) before proceeding to a new item. We felt that this procedure would result in a high degree of consistency in interpretation of responses and use of codes for each of the open-ended items.

Following the completion of coding, all data were keypunched and entered on computer data files for processing and analysis. All entries were checked for accuracy.

Following the generation of descriptive statistics for each item, somewhat different analysis procedures were adopted for the two questionnaires. In the ASQ, respondents were classified according to role: district level administrator, PIP project director, principal or vice principal, and other school-level administrative personnel. Table 6 displays the number of respondents in each role. A small number of respondents (slightly more than 10% of the total ASQ respondent group) were classified as uninvolved because they indicated virtually no involvement or familiarity with the local project.

The ISQ respondent sample was sufficiently large to permit classification of each respondent in two ways. First, respondents were classified according to their status in the project (project versus nonproject). Project teachers and aides were those who taught in the special project

Table 6

NUMBER OF RESPONDENTS TO ADMINISTRATIVE STAFF QUESTIONNAIRE (ASQ)
(By role and involvement)

Respondent Role	Involved	Uninvolved
District-Level Administrator	36	1
Administrative Assistant	2	1
PIP Project Director	18	0
Principal	53	2
Other School Administrators	34	13
Total	143	17

classes; nonproject teachers and aides were the regular classroom teachers who sent their students to the project; in R-3 schools nonproject instructional staff were teachers, other than English, mathematics, and social studies teachers, who had contact with the seventh graders participating in the project. Second, respondents were classified according to the PIP implemented at their sites. The number of respondents in each of the 12 resulting groups is shown in Table 7.

Table 7

NUMBER OF RESPONDENTS TO INSTRUCTIONAL STAFF QUESTIONNAIRE (ISQ)
(By PIP and project status)

PIP	Project	Nonproject
Catch-Up	25	45
Conquest	41	56
HIT	21	31
IRIT	9	37
PTR	33	32
R-3	58	43
Total	187	244

We used descriptive statistics from both questionnaires along with the narrative reports from interviews to describe events at each stage of implementation. However, for the major question of the impacts of PIPs on the teachers and aides involved in implementing the programs during this first field test, we undertook an analysis of ISQ data.

For the ISQ data analysis, we grouped items at two levels to create dimensions of interest. At one level, responses to subitems making up a single question or factor were combined to produce an overall mean score for that question or factor. The following question is an example of an item whose subitems were combined for the "professional judgment of project value" dimension:

> Please use the following scales to describe your general professional feelings about the PIP project in your school district.
>
> positive ______ : ______ : ______ : ______ : ______ negative
> indifferent ______ : ______ : ______ : ______ : ______ enthusiastic
> supportive ______ : ______ : ______ : ______ : ______ opposed
> warm ______ : ______ : ______ : ______ : ______ cool
> dissatisfied ______ : ______ : ______ : ______ : ______ satisfied

At the other level, items relevant to a single dimension (e.g., perceived impact on pupils) were combined. Thus grouped, the ISQ data were examined for differences across packages and between project and nonproject staff. Analyses of variance conducted on each of these factors permitted assessment of the reliability of differences between project and nonproject staff as well as differences among packages.

Contact Report Analysis

Contact reports were read during the year as they were received. Some preliminary categories of requested assistance were formulated.

The computer files of coded contact report forms were then used primarily for data retrieval. Contact report forms containing messages pertinent to each event in the start-up stage and to program operation as a whole were identified by computer search. The contact report forms thus identified were retrieved and interpreted; that is, the actual text of the report was read to verify or disconfirm the preliminary hypotheses about assistance given and received. Computer sorting was also used to determine the number of requests for assistance by site and by PIP and the major sources of assistance.

Observation Instrument Analysis

Observation data were compiled across centers within sites, and sites within PIPs; they were edited and transferred to computers for reduction and analysis. Three major implementation categories were defined on the basis of the observation instrument: instructional resources and facilities, instructional activities, and observer summary judgments. The sections of the observation instrument on which the categories were based can be found in Appendix D. Within each of the three categories, variables were formed through a variety of scaling and data reduction techniques ranging from simple addition of items to factor analysis. Implementation scores were then developed for each variable; these implementation scores constitute the major evidence of PIP instructional program implementation. The derivation of meaningful implementation scores on these variables required that SRI site visitors assigned to each PIP judge the relevance of each item on the observation instrument to the PIP requirements. That is, each item on the observation instrument was rated by each site visitor according to whether its presence or absence was an important or unimportant indicator of a well-implemented instructional program.

Operational definitions of the implementation variables or scales are given below:

Category 1: Resources and Facilities

Physical Environment--This scale is a composite of ratings on each of five 5-point scales describing the relative physical attractiveness of the instructional center. Items included are:

- Noise level (quiet - very noisy)
- Lighting (excellent - poor)
- Heating/ventilation (comfortable - uncomfortable)
- Space (cluttered - uncluttered)
- Attractiveness (high - low).

These scales were organized so that 5 was the best score, 1 the worst. Scales were independently rated by PIP specialists with ratings of 0 = irrelevant to 4 = very relevant to the PIP. The physical environment implementation score represents the average relevance-weighted judgments across the 5 scales for all observations.

Classroom Furniture--This scale is a composite average of 3-point ratings (relevance weighted) on the presence and adequacy of furnishings in the instructional center. Thus, average scores approaching 2.0 indicate the mere presence of relevant furnishings, whereas 3.0 indicates presence and adequacy of these relevant furnishings.

Instructional Equipment--This variable refers to the presence of PIP-specified instructional equipment, such as Systems 80 teaching machines, film projectors, tape recorders, and the like. Because this is a checklist variable, scores can be interpreted directly as the average proportion of relevant equipment observed in the setting.

Classroom Displays--This scale similarly refers to the proportion of PIP-specified displays observed in the instructional setting (or PIP center). These displays include art, progress charts, ethnic pictures, and the like, that are relevant to the PIP under observation.

Category 2: Instructional Activities Scales

Instructional programs characterizing the PIP sites were observed from both a pupil perspective and a teacher/tutor and aide perspective.

Pupil Instructional Variables--These are defined as the proportion or extent of PIP-appropriate learner activities and behaviors observed across observation periods. The following variables were defined:

(1) Activity range is the proportion of all PIP-relevant learner behaviors and activities observed during a 10-minute observation episode and then averaged across all episodes and observers. The score is evaluated against the expected complexity and variety implied by the PIPs.

(2) Appropriate behaviors refers to the type and extent of learning-compatible behaviors or tendencies. Such factors as attending, time-on-task, responding positively to adults, asking for help, and working independently, make up this scale. The maximum score is 3.0.

(3) Learner response is a factor-pure score (5 point), indicating observer judgments about pupil confidence, cooperation, satisfaction, enthusiasm, and attentiveness. Total score represents the average of the item scores, where 5.0 is the maximum and 1.0 is the minimum.

Teacher Instructional Variables--These refer to the type and extent of teacher use of PIP-specified (or implied) instructional methods, activities, and the like; the adoption by teachers and other adults of appropriate roles and behaviors; and the characterizations of the instructional process according to high-inference "style" judgments. The four variables developed to index implementation from the instructor perspective are:

(1) Activity range indicates the average percent of PIP-specified instructional activities observed across time samplings of the instructional process (e.g., drilling, demonstration, prompting, and the like). This percent actually refers to the proportion of targeted (PIP-specified) activities observed as well as the absence of those activities prescribed by the package.

(2) Appropriate behaviors is the mean 3-point rating (across items and observations) on a series of PIP-specified general behavior descriptors (e.g., progress checking, praising pupil work, rephrasing pupil questions, circulating, and the like). High scores reflect high relative occurrence of these appropriate behaviors.

(3) Instructional management is a factor-pure index of the organizational and structural properties of the instructional techniques observed at the site. The index is derived from ratings on 5-point scales of confident-unsure, controlling-indulged, organized-disorganized, and structured-unstructured. High scores indicate more confidence, control, structure, or organization.

(4) Instructional style is a factor-pure index of the personal/social style and personality characteristics of the instructor. Traits incorporated were clear, confident, pleasant, patient, enthusiastic, rewarding, stimulating, and responsive. Scores represent 5-point ratings averaged across these traits and across observations.

Category 3: Observer Summary Judgment Scales

The third section of the instrument required each observer to judge and rate overall implementation of the packaged program in terms of both PIP specific (Level B) and cross-PIP (Level A) attributes. The locus of instructional management (pupil or teacher) was rated on a number of attributes. The three indexes used to rate overall implementation are:

(1) PIP-specified procedures reflects the average 4-point ratings reported for the labs, centers, and classrooms on PIP-specific requisites. The higher the score, the more faithful was implementation relative to the package. Examples of items for R-3 are use of contracts, use of gaming and simulation, integration of gaming and simulation with curriculum, and use of learning centers.

(2) Materials and activities scores were not developed from PIP specific items but from a standard set of items that reflected implementation in any package. Examples of such items are variety of materials in use, pupil time on task, use of commercial materials, and use of teacher-made materials. Since specific PIPs prescribe different material/activity configurations, the items were carefully interpreted in terms of these PIP prescriptions in scoring the variable. Thus high scores (maximum = 3.0) reflect high overall appropriate use of materials and activities at the site.

(3) Instructional management is less well grounded in PIP prescriptions. It displays the dominant locus of control of instructional events and pupil activities. Average scores approaching 1.0 indicate control was essentially pupil centered; a score of 5.0 indicates total teacher/curriculum control, and 3.0 indicates a balance.

The PIP-specified procedures scale represents in our judgment the best measure in this summary category. This scale, which has an upper limit of 3.0, was constructed separately for each PIP and hence should be maximally valid. Because PIPs vary dramatically with respect to specification of procedures to be followed, however, the usefulness of this scale diminishes as PIP specificity diminishes.

In this report, mean implementation scores on each of the implementation scales are reported at the PIP and within-PIP site levels. Also, within-PIP site ranks and PIP average ranks are calculated. For each major implementation category, average ranks across scales are calculated for sites and for PIPs. Cross-category ranks are calculated for the overall sample of sites, at both site and PIP levels, to display implementation patterns.

Analysis of Student Outcome Data

Achievement test data were analyzed in terms of standard scores rather than raw scores. Our out-of-level testing required the use of standard scores created to permit interpretation across grades.[*]

Implicit in the techniques used for developing standard scores is the assumption of a scale where equal intervals represent equal increments of achievement (as measured by the MAT). These scales are not comparable across subtests, however; that is, one standard score point for Reading is not the "same amount" as one standard score point for Mathematics.

Some research has indicated that equivalencing the Primary I and Primary II does not work effectively. Barker and Pelavin (1975)[†] suggest that the standard score transformation may mask a discontinuity between the two tests, causing an increase in unreliability and a decrease in the generalizability of findings based on them. These results indicate that a reasonable linear adjustment for the raw scores for Total Reading of the Primary I test in the fall might be made by subtracting 15 points to make them comparable to the raw scores of the Primary II test in the spring. However, Barker and Pelavin do not recommend this adjustment and, since it has also been found that a linear adjustment for the standard scores of Total Reading can be made by adding 12 points to the Primary I standard scores, no adjustment has been made in the PIP data analysis.

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[*] The full description of the procedure used for making standard scores can be found in Guidelines for Test Use and Interpretation No. 1. (Harcourt Brace Jovanovich, 1972).

[†] Barker, P., S. Pelavin, "Analysis of Multiple Options in Education, A Working Note," The Rand Corporation, Santa Monica, California (1975).

In our analysis of the student achievement data we focused on determining, by the use of confidence intervals, whether the PIP projects met the criterion of educationally significant growth described for the original search for exemplary projects, that is, one-third of the norm group standard deviation on a nationally standardized test. Since the original exemplary projects had, at least in part, passed this criterion, it was expected that the most successfully implemented copies of them could also, at least in part, pass the criterion. Failure to pass would indicate failure either to implement the exemplary instructional program or failure to measure the criterion properly.

The latter possibility arises because the MAT test used in this study, with one exception,[*] is not the same as the tests used in the original projects. In examining the original project forms submitted to USOE's Dissemination Review Panel, we found that the original projects did not have sufficient data to insure that educationally significant gains were being achieved at each grade. Thus not all the exemplary projects passed the criterion at each grade.

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[*] Catch-Up grade 3.

For all the PIPs except PTR, the analysis strategy followed the approach suggested by Horst, Tallmadge, and Wood (1975) for norm-referenced analyses. In the case of PTR, the regression discontinuity model, as described by the same authors, was used.

The norm referenced model assumes that normal growth for disadvantaged children is such that the children maintain the same percentile from fall to spring with respect to the norm group. Under this assumption, Horst, Tallmadge, and Wood recommended the following approximate significance test:

$$T_{N-1} = \frac{\bar{Y} - \hat{\bar{Y}}}{\sqrt{\frac{S_x^2 + S_y^2 - 2r_{xy}S_xS_y}{N-1}}} ,$$

where T is approximately distributed as student's t with N-1 degrees of freedom, and where:

$\bar{Y}$ = observed mean posttest score
$\hat{\bar{Y}}$ = expected posttest score
S_x = pretest standard deviation
S_y = posttest standard deviation
r_{xy} = pre-post correlation
N = number of children on whom there are both pre and post scores.*

The expected posttest score is the spring score, whose percentile corresponds to the percentile of the observed pretest mean. While the assumption seems reasonable for students who learn a constant percentage of each year's test materials, it is not a reasonable model for children who learn a declining percentage of it or who simply stop progressing.[*] Since the students' expected scores play such a large role in whether the PIPs are judged successful, these points are returned to in Chapter IV.

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*The formula was modified in the standard way to use all observations, rather than only the pairs of observations.

The regression discontinuity model used for analysis of PTR data employed non-PIP first graders as the comparison group for the PIP participants. As described earlier, non-PIP first graders were those who scored too high on the test to be included in a PIP program. The regression discontinuity model was designed to take this into account.

In this model, the comparison group and the experimental group were compared by testing whether both groups had equal posttest values at the pretest cutoff point, as assessed by their pre-post regression lines. This model did not take into account unreliability of the pretest; nor did it take into account the random character of the cutoff score used for student selection in these two field-test projects. In addition, there was no special interpretation of the posttest difference evaluated at the pretest cutoff, since this difference was not an estimate of the treatment effect.[†]

The recommended test statistic is:

$$T_{N_t+N_c-4} = \frac{\hat{Y}_t - \hat{Y}_c}{\sqrt{\frac{SE_p}{N_t + N_c - 4}\left[\frac{1}{N_t} + \frac{1}{N_c} + Z_t + Z_c\right]}} ,$$

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[*] This argument might be recast in terms of the test material's relevance to what is learned.

[†] Horst, Tallmadge, and Wood, 1975, p. 68.

where t is distributed as student's t with $N_t + N_c - 4$ degrees of freedom, and where SE_p = the pooled estimate of the common error variance.

$$Z_t = \frac{\left(k - \overline{X}_t\right)^2}{\sum_{i}^{N_t} \left(X_{it} - \overline{X}_t\right)^2}$$

$$Z_c = \frac{\left(k - \overline{X}_c\right)^2}{\sum_{i}^{N_c} \left(X_{it} - \overline{X}_t\right)^2}$$

$$\hat{Y}_t = \hat{\alpha}_t + \hat{b}_t k$$

$$\hat{Y}_c = \hat{\alpha}_c + \hat{b}_c k$$

k = pretest cutoff score
$\overline{X}$ = mean pretest score
N_c = number of control children
N_t = number of experimental children.

Only one PIP site, PTR 2, has an experimental and control group in the standard sense. Children who scored low on the pretest were assigned to the PTR participant or nonparticipant group at random. For this project we may directly compare, by means of t tests, posttest scores for evidence of treatment effectiveness.

The 95% confidence intervals corresponding to the statistical tests described above were used to answer the question of whether the criterion was achieved. If the lower limit of the interval was above criterion, then the project passed. This procedure is statistically somewhat more rigorous than that used on the original sites' data, in that it specified the confidence with which we claim that criterion growth was, or was not, achieved.

Analysis of the attitude inventory data was less complex. The purpose of these analyses was to determine that the PIP projects did not diminish childrens' favorable feelings toward themselves, their peers, or their school. However, since the reliability of attitude data is generally a problem, especially for children's data, two analyses were used. The first one used the full data set, the other one excluded children who did not get the practice items correct on the Faces test or got a low "truth" score on the Coopersmith. The presumption is that children with a low score, or incorrect practice items, did not understand the instructions and consequently did not respond appropriately.

Frequency data from the PIP-specific attitude questionnaires were simply displayed, directly examined, and compared among PIPs and sites.

IV PIP FIELD-TEST RESULTS

In this chapter we report the results of the field test of PIPs. We describe PIP implementation by stages and the PIP project outcomes in terms of student achievement, student attitudes, and staff and parental attitudes.

Selection/Adoption Stage

In developing the PIP model, RMC had to create a first phase of the PIP implementation that effectively had not existed at the originating site. The process by which a project staff began to develop a successful project suited to the characteristics and needs of the school district had to be replaced by a process by which a potential field-test district could be made aware of the existence of PIPs and choose to implement one of them.

RMC's Analysis and Selection Kit (ASK) was in the process of being completed. Since it was not employed, its effectiveness could not be evaluated. Nevertheless it seemed appropriate to view the results of the actual selection/adoption events against the background of intentions and to indicate how actual events affected the start-up stage. Our report of the selection/adoption stage is based primarily on interviews with administrators in field-test sites, Title III program officers and OPBE staff. In addition, proposals from the local education agencies for the Title III grants were reviewed, including several from districts that were not awarded grants.

USOE Announcement of PIP Grants

Once it was decided that PIPs could be disseminated with grants of Title III monies, both OPBE, who sponsored PIP creation, and the Title III program officer became actors in the dissemination process. The constraints imposed by the decision to award funds for FY 1975 made the timely completion of the ASK impossible.

As the funding agency, the Title III program office announced the availability of PIPs in the Federal Register and in a memorandum sent to superintendents of schools. The Federal Register announcement, issued on February 12, 1974, was a statement of intent to make grant funds available to localities to support "projects which made a substantial contribution to the solution of critical educational problems common to all or several states...." The memorandum to superintendents was drafted in November 1973 and released in February 1974. It described the four types of special projects available for FY 1975 under Section 306 of Title III: developer-demonstration projects, adoption projects, statewide facilitator projects, and projects to field test "Project Information Packages."*

The PIP concept was described as packaged approaches to compensatory education in reading and mathematics that had been validated by USOE at both elementary and secondary levels. The memo indicated that up to eight educational approaches would be packaged but did not describe them further.

The memo to superintendents also described several other elements which led to confusion later in the PIP field test. It mentioned that a cohesive plan to initiate evaluation of the implementation and effects of the PIPs, and the establishment of two comparison groups were required. It was hoped that LEAs would replace all or part of their Title I projects with this PIP project for purposes of comparing their effectiveness with disadvantaged children. The paragraph following the brief description of PIPs stated that information on preference for the handicapped should be included in applications for adoption projects; it was not made clear that this did not apply to applications for PIP projects. The criteria by which USOE would evaluate applications were listed, and districts were told to apply for a lump sum grant of $100,000.

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*The first three kinds of projects became elements in the National Diffusion Network.

During the period when applications were requested and criteria appeared in the Federal Register, draft ASK materials were submitted to OPBE: a one-page flier about PIPs, a matrix describing PIP programs, a one-page listing of factors LEAs should consider in implementing any PIP, and a one-page description of each PIP program. OPBE also had Dissemination Review Panel (DRP) forms describing each of the six exemplary programs. As these materials accumulated, OPBE learned more about the PIPs, the exemplary programs and the necessity of matching applicant LEAs with appropriate programs.

While the OPBE staff did not feel the draft ASK materials could be shared on an equitable basis with potential applicants at that late date, the information was spread within USOE. It was decided to try to assign PIPs to the LEAs on the basis of the needs assessments in LEA grant applications. Getting the proper information to prospective LEAs through the Title III program office, where many other kinds of grants are also handled, would have been very difficult, especially since information came in little by little and in draft form rather than in an organized package. Another factor which might have entered into the decision not to give applicants more details about the programs as they came in was

OPBE's desire to provide a site-by-PIP configuration appropriate for a balanced PIP evaluation design.

The PIP Dissemination Procedure

Except for the obvious assumption that a sufficient timeline, established by the disseminator, would be necessary to allow the LEA ample opportunity to choose a PIP and ensure that affected district personnel found it acceptable prior to the scheduled start-up, the ASK-PIP concept did not include a strategy for package dissemination. For these first six PIPs it was undoubtedly assumed that clear lines of communication would be established between the dissemination agent (USOE) and LEA personnel and that, for their first use, there would be financial support for implementation. It was also assumed that the dissemination agent would monitor adherence to PIP specifications.

The opportunity to field-test PIPs under the auspices of Title III was arranged in the Winter of 1973-74. The timeline originally envisioned for selection by LEAs was drastically condensed. Notification of the availability of grants, the application deadline, the review process and the awarding of grants followed the timeline necessitated by the FY 1975 funding deadline. This meant that LEAs had very little time in which to make the decision to apply for the grant and prepare their needs assessments. In fact, most LEAs relied on needs assessments which they had already prepared earlier for Title I grant applications. Since the information provided in the memorandum to superintendents was the only information that USOE intended to provide to LEAs, no other plans for communication between USOE project officers and applicant LEAs was planned at this stage.

The notification of LEAs about PIP grants did not proceed as USOE assumed it would: of the 17 LEAs that eventually received PIPs, only six first heard about the availability of the grants through the announcement in the Federal Register or the memorandum to superintendents. Ten of the 17 sought more information about the nature of the "packaged educational approaches" they were applying for. Table 8 shows the sources of initial information about PIPs for the 17 field-test sites by availability of further information.

None of the sources of initial information provided the LEAs with specific and correct information about the kinds of programs available as PIPs. For example, one LEA superintendent who heard about PIPs from an official in Washington told the author of the grant application that PIPs were six instructional strategies called Catch-Up, which would go into kindergarten and first grade classrooms. That LEA was one of the seven that did not seek further information. The superintendent's misconception is an example of the kinds of misconceptions three of the LEAs entertained about the nature of PIPs. The other four either felt they understood the overall idea or did not have time to seek more information.

For the most part, LEA personnel did seek further information about PIP program types from a variety of sources; only half of them were able to obtain it. As shown in Table 8, there is no clear relationship between the source of initial contact and the receipt of PIP-specific information. It is interesting to note that in all cases where specific PIP project information was received, it was provided by Title III officials in Washington. Three of the LEAs were in the same state and received the information via that state's Title III office because regional planning officials intervened on their behalf. However, this one open, if not sanctioned, line of communication to Title III officials in Washington did not work in all cases. One LEA that was unsuccessful in obtaining PIP-specific information had contacted the Title III director's office and was told that no information was available. Another LEA that

Table 8

AVAILABILITY OF PIP-SPECIFIC INFORMATION TO LOCAL EDUCATION AGENCIES
(by Source of First Contact)

Source of First Contact	No Attempt to Get Information	Unsuccessful Attempt	Information Provided by Title III	Row Percentage of Total
Federal Register or Memo to Superintendents	2	3	1	35.3% (6)
State Title III or Other State Official	2	2	2	35.3 (6)
Title III Official in Washington	0	0	1	5.9 (1)
Other Official in Washington	2	0	0	11.8 (2)
Regional Official in State	1	0	0	5.9 (1)
Education Newsletter	0	0	1	5.9 (1)
Column Percent of Total	41.2% (7)	29.4% (5)	29.4% (5)	100.0% (17)

did receive PIP-specific information had also contacted the director's office and was referred to his Title III program officer in another part of the office. It is possible, although not demonstrable with current data, that some LEAs simply decided not to apply after unsuccessful attempts to get more specific information.

Lack of clear disseminator-adopter roles and lack of information about PIPs and programs meant considerable confusion and misinformation associated with the application process and with the review process. When LEAs were notified of their grant awards, they were invited to a meeting in Washington. The briefings at the meeting dispelled some of the misinformation LEAs had about PIPs but it did not clarify the nature of the adjustments on the part of LEAs that the federal regulation under Title III or under the PIP field test conditions themselves would require. Although RMC had assumed that the LEA officials preparing the PIP grant applications would be, for the most part, the same people who would become project leaders, the LEA officials who came to the Washington meeting were generally not the people who became project directors. Thus some understandings achieved between USOE disseminators and LEA adopters were lost when the PIP project directors were eventually appointed at the local sites.

Budget negotiation was accomplished at the Washington meeting. But the negotiation process was hampered by the fact that the only budgetary information available to Title III program officers was originating site program costs. Since personnel from 9 LEAs had not been aware that budget negotiation was on the agenda, they did not have the appropriate district costing factors. Three of the four sites that eventually reported that their budget was too low had not been prepared at the Washington meeting to negotiate a grant. People from several LEAs reported that one district official attending the meeting expected to get $100,000 and, when the total budget figure offered came to $33,000, the district refused the grant. There were also four LEAs receiving more money to implement the PIP than they expected.

Since USOE's packaging concept was based on an assumption that technical assistance would not be required, and since part of the purpose of the field test was to examine that assumption, LEAs were told it would be best not to contact the originating site for help. They were given little guidance about whom to contact for the answers to any questions. The Title III-OPBE role division in USOE, the LEA grant official-project director role division at the project sites, and the SRI-RMC roles all contributed to the difficulty project staff faced in seeking guidance throughout the implementation year.

LEA Motivation to Apply for a PIP Grant

Underlying the ASK was the concept that the packaged program had been proven successful and that replication of the program in a similar, new site would ensure similar success. The implicit assumption was that LEA personnel would readily grasp this concept and accept the packages on that basis, that is, because LEA personnel understood the purpose of and need for replication, they would follow the PIP guidelines and accept the constraints imposed by the PIP field test to ensure that replication. Also implicit were the expectations that LEA personnel would:

- Recognize when their situation was similar enough to the original school district environment described for the project to be feasible.
- Reject a program as infeasible on the basis that the original environment was too dissimilar from their own.
- Upon deciding to adopt a PIP, accept hierarchical changes and adapt to innovative practices, including unconventional staff roles, different scheduling of students, and use of instructional materials and equipment as prescribed.

For the most part, LEA personnel simply recognized their need for special compensatory education programs in particular schools or at certain grade levels and did not see a way to find sufficient funds within their district to develop a program themselves. This, in brief, was the motivation of the majority of LEAs for applying for PIP grants.

Table 9 shows the responses of LEA administrative staff to the questionnaire item asking for a priority rating of selected reasons for applying for a PIP grant. Almost 72% of the respondents listed awareness of educational needs of the LEA as the highest priority, while only 3.3% listed replicating a program which had been proven successful as highest priority.

The generally low priority ranking assigned to the need for funds (43.2% of the respondents listed it as the lowest priority item) must be viewed in light of the fact that all other response possibilities were related to educational needs, which are given priority by educators. Several applicants were LEA officials whose major role is to seek federal funds to support local projects. The existence of these $100,000 Title III grants was, by itself, an inducement to apply. Either in the grant application or during site visit interviews all LEAs stressed their need for federal funding to carry out the project, and only five expressed the belief that they would have the finances to continue the program if it proved successful.

Since LEA personnel did not understand the requirement to "replicate" prior to receiving their PIP grant, they could not take many of the steps that would allow them to implement PIP specifications exactly during the start-up phase. With one exception, even those LEAs that had received some specific information about the six different PIP programs prior to application did little to ensure that replication of one of them would be acceptable to affected personnel. The one LEA that anticipated

Table 9

PERCENTAGE OF REASONS FOR APPLYING FOR A GRANT
(by Priority Assigned)

	Priority Rating					Total Responses
	1	2	3	4	5	
Awareness of educational needs of the overall student population	71.9%	22.0%	7.9%	2.9%	0.0%	134
Interest in starting a program to serve specific grade levels	14.0	39.3	33.1	10.2	2.3	135
Interest in replicating a program that had already proven successful in another district	3.3	18.0	33.9	29.2	13.6	132
Pressure from the community to raise test scores	5.0	7.3	11.8	34.3	40.9	133
Need to bring additional sources of revenue into the district	5.8	13.5	13.4	23.4	43.2	133
Total responses	121	150	127	137	132	667

Note: Percentages were calculated on the basis of number of responses giving the priority rating in question. Since multiple responses of a given rating were allowed, the row percents do not equal 100.

problems with replication recognized that the busing specified in the PIP for which they were applying might be considered racially oriented and made sure the Board of Education understood and accepted its actual purpose.

USOE had expected that LEAs would be motivated by the replication notion once they learned the reasoning behind it. This was not often the case. Once LEA personnel learned that they were required, as a condition of the grant, to follow the specifications in the PIP, they attempted to carry out PIP specifications to the letter (with varied success and sincerity) because of the USOE requirement and not because of an awareness of a need to replicate. Personnel in many LEAs still did not understand that the purpose of replication was to ensure project success. It appeared to one interviewee that the government's purpose conflicted with the educational purpose behind replication. He felt that the purpose of the field test was to "see if a program can be replicated rather than to see how good the program is. My goal is to find a program that brings up scores and helps kids."

Since LEA motivation to adopt the PIP was based on the desire to take advantage of federal funds in order to have a program that served the needs of a certain segment of students and since the motivation to implement the PIP as specified was based primarily on the desire to satisfy the requirements of the federal grant, rather than on the understanding that replication would ensure that student needs were served, the degree to which LEAs did attempt to carry out the PIP specifications could be expected to vary widely. In most districts, however, there was a sincere attempt to follow the PIP guidelines. Only one LEA, whose motivation for applying for a grant was to obtain funds to expand their own remedial reading program, made only token attempts to follow the PIP.

Those LEAs that were required to make few changes in the regular school program, such as PTR project sites, and those where there was agreement with the philosophy and goals of the exemplary program described in the package followed the PIP specifications as closely as possible, even to the extent of engaging in particularly specified practices with which they did not fully agree.

Context Matching

Since each PIP was developed on the basis of RMC's observation of only one site, it did not seem possible for them to identify the specific, intangible factors which would be the sine qua non of project success at replicating sites. Certain judgments were made regarding factors that were obviously not vital and those which very well might be. The proximity of an original, exemplary program to some natural landmark was obviously not essential to the program's successes, but RMC judged that the ethnic composition of the site might very well be essential.

RMC's prototype ASK package included a one-page description of the exemplary program site in which the following characteristics were described:

- The type of student served, in terms of socio-ethnic background as well as grade and skill levels.
- The location, size, or economic base of the community.
- The project director's role and history within the district hierarchy.
- The availability of specific resources, including staff, facilities, and materials.

Since ASK materials were not available to them, LEAs applying for PIP grants did not have the information on the basis of which to match their setting to that of the original site. Those LEAs that had some PIP-specific information, however, do not seem to have understood that close context matching might be a crucial factor in successful implementation. Only one of the five LEAs that had PIP-specific information cited originating site context in their application, and that LEA did so only insofar as it supported their request for the PIP in question.

The needs assessments that LEAs prepared did not provide USOE with sufficient information to do reasonable matching. The applications often contained offers to comply with whatever requirements USOE might specify. Reviewers requested more information but still had few appropriate grounds on which to base context matching. The criteria used by USOE to review grant applications were based on some PIP-specific considerations, as well as the considerations of Title III requirements and the OPBE evaluation plans, but specific contextual factors such as district size and target population ethnicity were not included. The review criteria were:

- The extent to which the applicant provided data on the target population's socioeconomic status and ethnicity, and on grade levels to be served.
- The extent to which the applicant provided evidence that the LEA had a high concentration of students with severe deficiencies in reading and/or mathematics (related in terms of both severity and magnitude).
- The extent to which the rationale of need for reading and/or mathematics at certain grade level(s) was satisfactory.
- The extent to which the applicant seemed prepared and able to replicate.

This last criterion included a number of specific considerations important to the tryout experiment:

- The extent to which the applicant indicated an ability to provide human and material resources.
- The applicant's willingness to install the PIP selected.
- The availability of state and local funds to bear some operational costs of the program.

- The applicant's willingness to participate in an overall monitoring and evaluation design of the field test.
- The applicant's willingness to develop an appropriate local evaluation plan for the specific PIP selected.
- The applicant's ability to implement the PIP at the start of the 1974-1975 school year.
- The information provided on LEA's past practices and policies regarding instructional strategy and utilization of personnel (including paraprofessionals and part-time teachers).
- The provision for the equitable participation of children enrolled in private nonprofit schools.

These criteria were then rated according to quality on a scale of 0 to 5: 0 = missing, 1 = poor, 2 = fair, 3 = good, 4 = outstanding, and 5 = not applicable. As can be seen, this review was oriented to the quality of the proposal and was too generalized to ensure a close context matching. The next part of the review procedure was to list appropriate assignments of packages to LEAs, and to list major strengths and weaknesses and also suggested modifications to correct those weaknesses.

Each federal Title III official reviewed the applications from the LEAs in the state(s) within his jurisdiction. The review took into consideration the recommendations of the Title III coordinators in the state(s) and was therefore also influenced by priorities of Title III officials (e.g., two state coordinators advised awarding a grant to a district that had not received one before rather than awarding it to the district with the better proposal).

Because the amount of money available in each state for Section 306 grants is set and because each state department of education has a role in influencing the kinds of grant applications that LEAs submit to the federal government under this section, the grant applications for the PIP projects were few and they were not from a representative sample of

LEAs. Less than 50 LEAs applied; none were from states west of Texas; most were small rural or small city districts although several were large urban districts (e.g., Dallas and Cleveland). However, it was only as the field test progressed that it became possible to determine which site characteristics were important for implementation of each PIP.

Implications for Selection/Adoption Assumptions

To summarize the implications for the underlying assumptions, it appears that:

- We cannot say whether LEAs would have applied only for programs in contexts that matched their own. However, it is doubtful that they would have known the relevant dimensions merely from a description of the original program site and, under the same funding circumstances, it is doubtful that they would have rejected a PIP grant on the grounds that the original site had some quite different features from theirs.
- The replication principle was not a motivator for LEAs.
- The project director may or may not be automatically involved in a grant application. The involvement of the project director depends on the size of the district (the larger, the more likely the project director is not involved). It probably also depends on whether the grant has enough money for a project director's salary and whether the application requires the potential project director's involvement.
- LEAs for the most part were willing to adapt themselves to these six programs in terms of hierarchy, scheduling, facilities, and the like, as a condition of the federal grant.

As expected by RMC, LEA motivations and context mismatches had profound impacts on the start-up processes in the field-test projects. The actual selection/adoption processes that had occurred made it clear that the role of the dissemination agent and the lines of communication among participants in the adoption process are at least as important as parts of a workable dissemination strategy as the ASK and PIP materials.

Start-Up Stage

PIPs did not arrive at field-test sites immediately after the Title III grants were negotiated. Components 1-4, the Starter Set: Planning, Project Management Directory, Displays, and Staff Qualifications and Preparation Set, and component 9, the Hardware/Software Packet were sent to the LEA offices in July. By mid-August the project directors had the PIP box and the rest of its contents. First, project directors themselves had to gain a thorough understanding of the program. Then project staff had to be chosen or hired; staff and school principals had to be oriented to the project; instructional materials and equipment had to be selected and ordered; arrangements for classroom space had to be made; and furniture and supplies had to be surveyed and orders placed as necessary. The project directors were also responsible for planning and conducting preservice training for staff, which in itself was a formidable task, given the time available. Clearly, for programs such as Catch-Up, whose calendar was intended to begin in March, the arrival of the PIP was extremely late. Even the PTR package, with the shortest lead time, arrived a month or two after its intended arrival time.

In this section we describe the start-up stage based primarily on our site visit interviews, but also on answers to the Administrative and Instructional Staff questionnaires. It will become clear that all of the many start-up tasks were accomplished in the field-test sites, and instructional programs were launched on time or with only a few weeks delay. Nevertheless, there were several start-up activities that were not carried out as specified (e.g., preservice training, project directors' roles). It was extremely difficult to disentangle the influence of the time shortage from the influence of other factors in the implementation of the six PIPs in the 19 field-test sites during the start-up stage.

Configuration Schemes for the Six PIP Programs

As grants for PIPs were being arranged, it became clear that the PIP mechanism did not take into account the possibility that new sites, even if otherwise contextually matched, might require configurations (organizational arrangements, number of schools, teachers, and classroom units) different from the original sites. Just as the budgets were to be negotiated, USOE requested that RMC suggest configurations that would be in keeping with the generally smaller size of the applicant LEAs. The configurations suggested were tailored from information obtained from the original sites and RMC's observations of the exemplary projects in operation. The criteria used to scale down each PIP depended on the complexity of the structure of the program, the stages through which the original program had evolved, cost-effective considerations, and the type of budget guidelines generally set by the Office of Education. Every effort was made to preserve the essential characteristics or most dominant organizational features of the program while making it manageable for a new project director.

In projects such as Conquest, where the organization of reading rooms and clinics, supervisory clinicians and aides, and the like is complex and changes in the original program have been numerous, essential organization features of the program were difficult to capture. The original program served 22 schools and the field-test projects would be serving from 3 to 7 schools. The PTR program, on the other hand, has been implemented (by means other than packages) around the world under several different configurations in varying numbers of schools. Its structure is quite simple and the scaling-down task was not difficult. HIT, was only operating originally in two schools and was projected to be placed in two schools in the field-test sites. IRIT, R-3, and Catch-Up configurations described by RMC were also fairly close to actual configurations at the original sites.

We discuss below the configurations developed by RMC for each of the PIPs in the field test and summarize which structures each site actually implemented.

Catch-Up

As shown in Figure 9, the Catch-Up program consists of a half-time project director who administers the project in a number of schools.

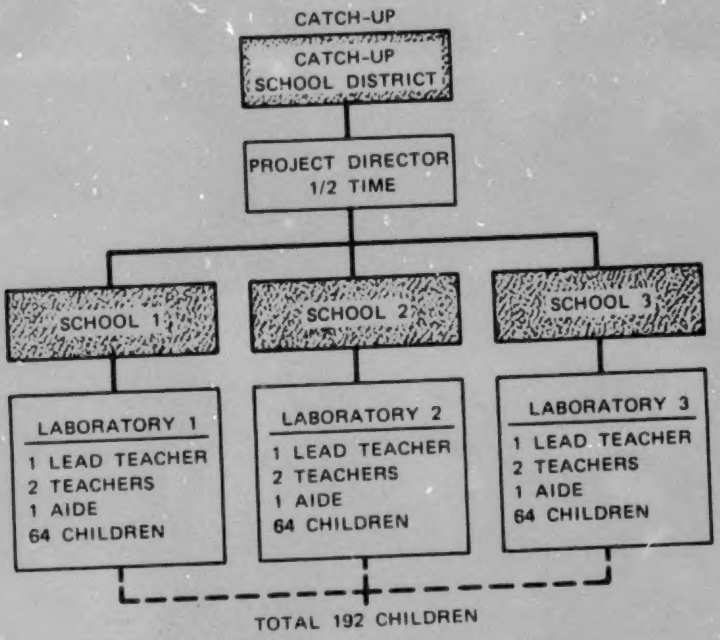

CATCH-UP
CATCH-UP SCHOOL DISTRICT
PROJECT DIRECTOR 1/2 TIME
SCHOOL 1
SCHOOL 2
SCHOOL 3
LABORATORY 1
1 LEAD TEACHER
2 TEACHERS
1 AIDE
64 CHILDREN
LABORATORY 2
1 LEAD TEACHER
2 TEACHERS
1 AIDE
64 CHILDREN
LABORATORY 3
1 LEAD TEACHER
2 TEACHERS
1 AIDE
64 CHILDREN
TOTAL 192 CHILDREN

FIGURE 9 CATCH-UP CONFIGURATION

Each school has a Catch-Up lab which serves approximately 64 children and is run by one lead teacher, two regular teachers, and an aide. According to interviews and observations of the five Catch-Up field-test sites, the four small-town sites modified the configuration shown in Figure 9 principally by having the program in only one school with a single lab. At one of the Catch-Up sites the project director assumed the position of lead teacher also; both positions are half-time. At another Catch-Up site the project director was also the principal in the school where the lab was placed.

Conquest

Figure 10 shows the configuration developed by RMC for Conquest field-test sites.

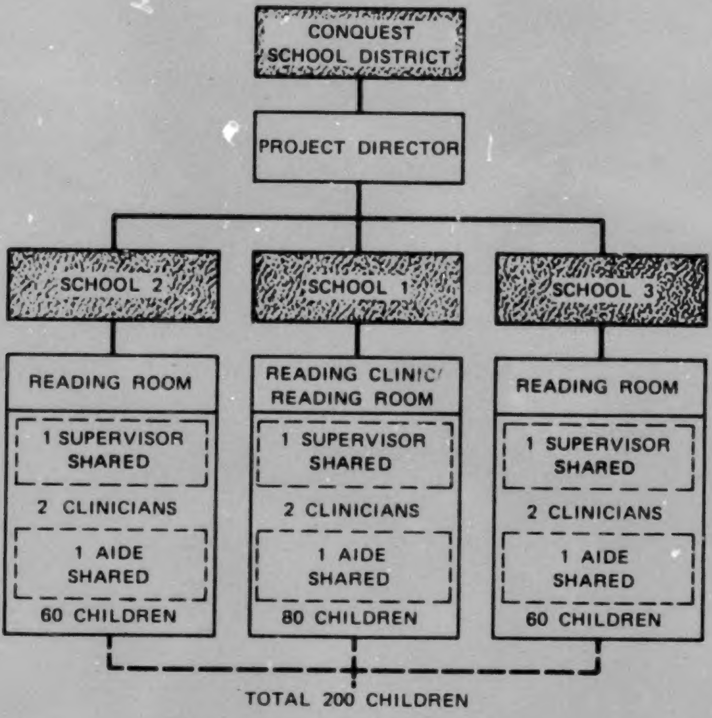

CONQUEST SCHOOL DISTRICT
PROJECT DIRECTOR
SCHOOL 2
SCHOOL 1
SCHOOL 3
READING ROOM
READING CLINIC/ READING ROOM
READING ROOM
1 SUPERVISOR SHARED
2 CLINICIANS
1 AIDE SHARED
60 CHILDREN
80 CHILDREN
60 CHILDREN
TOTAL 200 CHILDREN

FIGURE 10 CONQUEST CONFIGURATION

As stated previously, the original Conquest site served 22 schools and nearly 1,000 students. Both the number and type of staff members has varied over the years. The program consists of one project director and a number of schools organized in groups of three. The treatment centers are organized into reading rooms for grades one through three and reading clinics for grades four through six. Each clinic or reading room is run by two clinicians. An aide and supervising clinician are centrally based in one of the schools but part of their time is shared with the other two schools. Two of the schools serve 60 children and the school which houses the aide and supervising clinician serves 80 children. Clinicians serve 30 children per year while the supervising clinician serves only 20 children.

In the PIP field test there are three project sites. Conquest 1 served three schools, but only 140 students because they felt their grant was not sufficient to serve 200 students. This meant that one of the treatment centers served only 30 children and had only one clinician. The supervising clinician's role was ambiguous in the PIP, and in this project the supervising clinician was not shared among centers although the aide was. The supervising clinician functionally served as a regular clinician. Conquest 2 served six schools and 400 students, with the configuration replicated as specified. Conquest 3 added an intern and an aide for each clinic or reading room. The clinics generally were run by one clinician, one intern, one aide, and a shared supervising clinician.

High Intensity Tutoring

The recommended HIT configuration, almost identical to that at the original site, is shown in Figure 11.

In the two field-test sites some modifications were made to the HIT configuration. At HIT 1 there were two schools involved but only one had both a reading and math center. At HIT 2 the middle school had not been built yet and students were housed at both an elementary and high school in the district. Although constituting only one student body, each group of middle school students had a reading and math center. This division of students also affected the make-up of the tutor-tutee

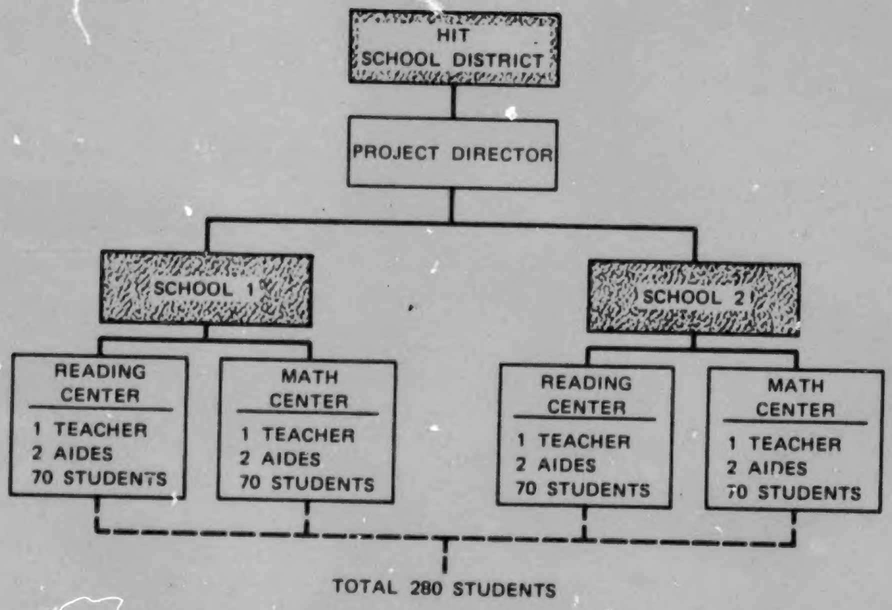

HIT SCHOOL DISTRICT
PROJECT DIRECTOR
SCHOOL 1
SCHOOL 2
READING CENTER
1 TEACHER
2 AIDES
70 STUDENTS
MATH CENTER
1 TEACHER
2 AIDES
70 STUDENTS
READING CENTER
1 TEACHER
2 AIDES
70 STUDENTS
MATH CENTER
1 TEACHER
2 AIDES
70 STUDENTS
TOTAL 280 STUDENTS

FIGURE 11 HIT CONFIGURATION

pairs, and modifications were made to package specifications in order to serve both groups (e.g., older and younger student tutors than specified in the PIP were used).

Intensive Reading Instructional Teams

The IRIT configuration is shown in Figure 12.

The project director heads the IRIT project, and there are three schools involved in sending participants to the project center during the year. There is some ambiguity in the PIP specifications about whether to serve students from only one school or several students from each school for each cycle of the program. The center is supposed to have one lead teacher and two regular teachers. Forty-five children should be served per 10-week cycle.

All three field-test sites had three cycles during the year and 45 students per cycle, but each project included some modifications

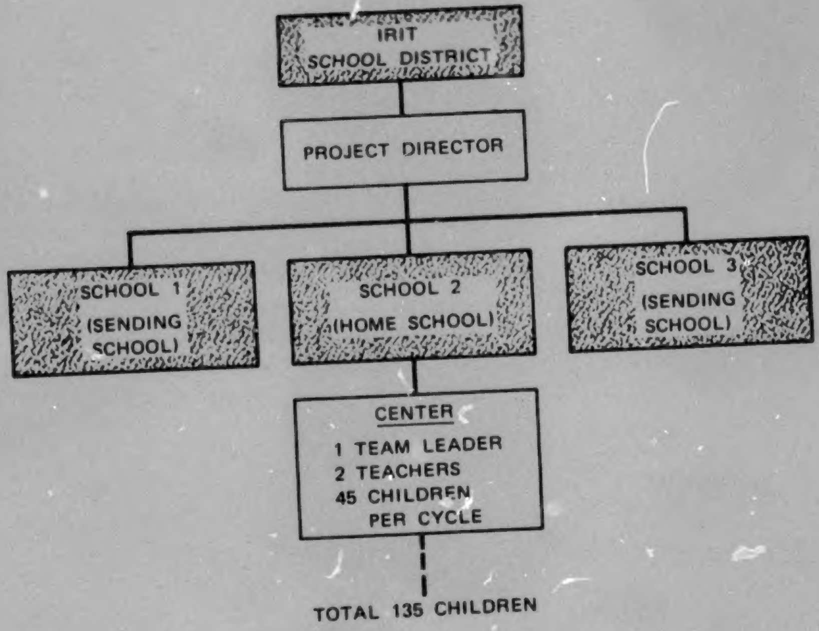

IRIT
SCHOOL DISTRICT
PROJECT DIRECTOR
SCHOOL 1
(SENDING SCHOOL)
SCHOOL 2
(HOME SCHOOL)
SCHOOL 3
(SENDING SCHOOL)
CENTER
1 TEAM LEADER
2 TEACHERS
45 CHILDREN PER CYCLE
TOTAL 135 CHILDREN

FIGURE 12 IRIT CONFIGURATION

to the IRIT configuration. IRIT 1 included three schools in each cycle but used a satellite building outside of all three schools for a treatment center. The staff consisted of two regular teachers and one lead teacher as specified in the configuration. IRIT 2 consisted of three schools, with only one "sending school" per cycle. The staff consisted of three teachers but none was designated to be a lead teacher. IRIT 3 used three different configurations for each cycle. During the first cycle, the project consisted of only one school. There were three teachers involved but none of these teachers was designated as a lead teacher. During the second cycle, four additional schools were added to the project and the original school used in the first cycle was designated as the home school. (Students were bused to this school from the other four sending schools). During the third cycle, the project conformed to the designated program configuration, that is, there were two sending schools and one home school.

Modifications were made in the designated clerical staff at two of the IRIT sites. At IRIT 2 there was one full-time secretary that served both the project director and IRIT instructional staff rather than one half-time secretary for each. At IRIT 3 only one half-time secretary was hired to be shared by the project director and IRIT instructional staff.

R-3

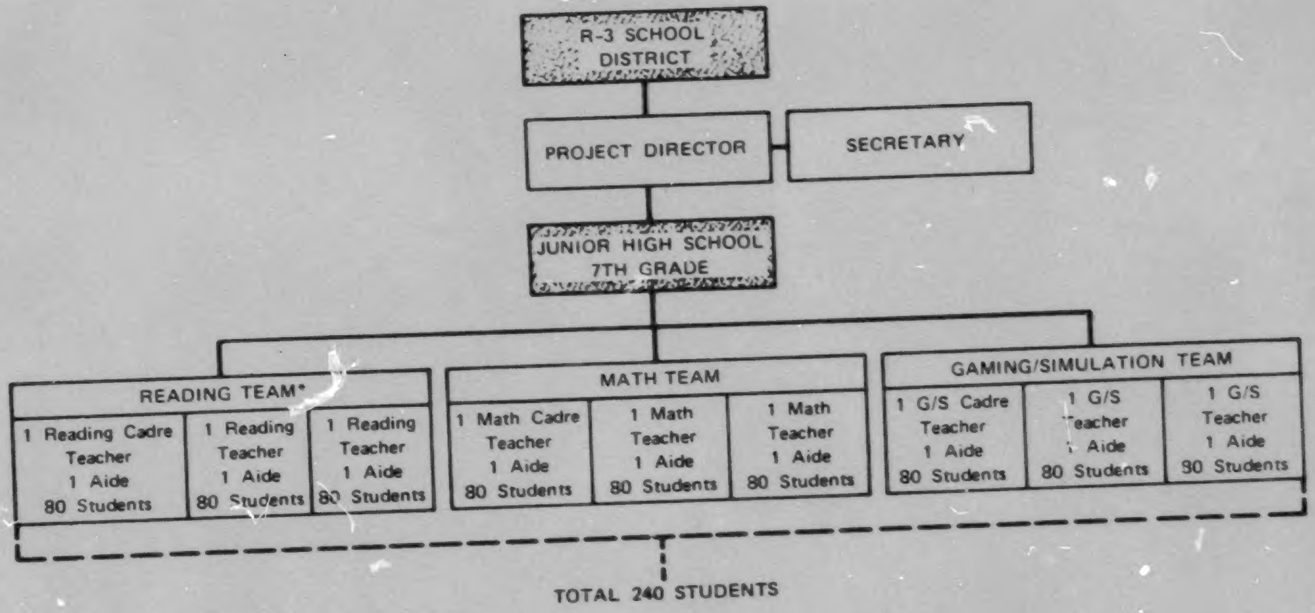
For the R-3 projects the configuration shown in Figure 13 was designed for the field-test sites. It is the same as that at the exemplary site.

R-3 consists of a project director, secretary, and one junior high school group of seventh graders. The project configuration consists of three reading classrooms with aides, three math classrooms with aides, and three social studies classrooms with aides. Each classroom consists of one teacher and one aide, and 260 students are served on a rotating schedule. Of the four R-3 field-test sites, three followed this configuration with the exception of the number of students served and the ratio of students to staff. In one of these three approximately 335 children were served, which meant that teachers had to teach five or six periods rather than the recommended four periods per day and class size was also increased beyond the recommended student-to-staff ratio of 20:1.

Programed Tutorial Reading

Figure 14 shows the configuration developed for the PTR program.

The project on which the PIP was modeled consisted of a half-time project director, a half-time secretary, and a full-time tutorial supervisor. Each classroom was staffed with one tutor to serve 15 children. There were 15 schools but it was clear from other installations


R-3 SCHOOL DISTRICT
PROJECT DIRECTOR
SECRETARY
JUNIOR HIGH SCHOOL 7TH GRADE
READING TEAM*
1 Reading Cadre Teacher 1 Aide 80 Students
1 Reading Teacher 1 Aide 80 Students
1 Reading Teacher 1 Aide 80 Students
MATH TEAM
1 Math Cadre Teacher 1 Aide 80 Students
1 Math Teacher 1 Aide 80 Students
1 Math Teacher 1 Aide 80 Students
GAMING/SIMULATION TEAM
1 G/S Cadre Teacher 1 Aide 80 Students
1 G/S Teacher 1 Aide 80 Students
1 G/S Teacher 1 Aide 80 Students
TOTAL 240 STUDENTS

*Each team serves the same group of 240 students.

FIGURE 13 R-3 CONFIGURATION

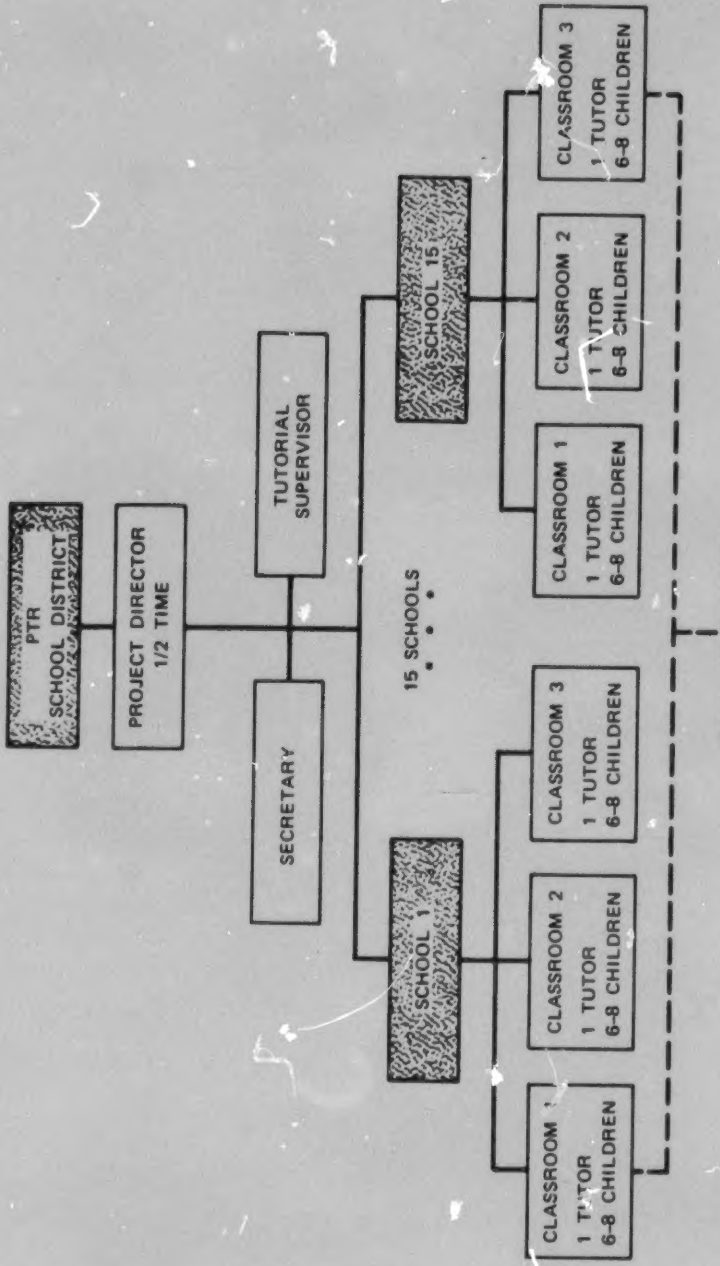

PTR
SCHOOL DISTRICT
PROJECT DIRECTOR
1/2 TIME
SECRETARY
TUTORIAL
SUPERVISOR
15 SCHOOLS
• • •
SCHOOL 1
SCHOOL 15
CLASSROOM 1
1 TUTOR
6-8 CHILDREN
CLASSROOM 2
1 TUTOR
6-8 CHILDREN
CLASSROOM 3
1 TUTOR
6-8 CHILDREN
CLASSROOM 1
1 TUTOR
6-8 CHILDREN
CLASSROOM 2
1 TUTOR
6-8 CHILDREN
CLASSROOM 3
1 TUTOR
6-8 CHILDREN
TOTAL 312 CHILDREN

FIGURE 14 PTR CONFIGURATION

of PTR that more or fewer schools and classrooms could be involved without affecting the nature of the program.

In PTR 1, the suggested configuration was used. There were two schools involved in the project. One school had seven classroom tutors and served 91 students (a ratio of 1:13), while the other school had six classroom tutors who served 78 students (a ratio of 1:13). The administrative staff in this project consisted of the prescribed half-time project director, half-time secretary, and full-time tutorial supervisor.

Nine schools were involved in the program in PTR 2 with 15 paraprofessional classroom tutors until January, when 7 additional tutors were added to serve the schools that did not have designated tutors. The administrative staff consisted of a part-time project director and secretary and a full-time tutorial supervisor. The grant was issued to accommodate 325 children in this site.

In both PTR field-test projects the size of the Title III grant budget determined the configuration. A certain amount of money was budgeted for hiring paraprofessional tutors. The number of tutors available for the project at each site determined the number of students who could be served.

Discussion

Most of the field-test projects, with adjustments for size, generally stayed within the configurations recommended by RMC. As the following sections will show, roles actually performed by project directors, lead teachers, supervising clinicians, etc., differed from the hierarchy implied in the configuration but the nominal structure was there. Adjustments of project size to fit new sites were not anticipated adequately within the ASK-PIP mechanism. Future mechanisms will have to take into consideration not only that sites vary in size, number of students, classrooms, school buildings and state- or locally-mandated teaching ratios, but also that projects are dynamic and change in size over time.

The most profound impact of variations in project configurations is on project costs. Volume III indicates how dramatically the scaling-down process for the PIP field test affected per pupil costs of the programs. Salaries for a full-time project director and a teacher spread over only 70 students makes for a high per pupil cost. This suggests that, in order to be cost effective, context matching in terms of district size is an important factor to consider in PIP project implementation.

Project Roles and Staff Hiring

The PIPs were built on the assumption that potential project directors at the new sites would be involved in applying for PIP grants and, being one of the leaders in the district, would assume authority over the project upon grant award and would have the autonomy within the district to assume the management roles.

During the selection/adoption stage in several sites, LEA staff involved in the decision to apply for a grant and in writing the application were district Title I directors, federal program coordinators, or district reading coordinators who, as part of their jobs, were responsible for bringing federal funds into the district. Except in the large city districts, these people were in jobs similar to those which the project directors held at the original exemplary sites.

However, rather than becoming PIP project directors themselves, these people, except in very small districts, appointed someone else as project director after the Title III PIP project grant was awarded. Although 12 of the people involved in the grant application process had been identified as project directors in the application itself, only four of them--all at the small Catch-Up sites--actually became project directors, and one resigned during the start-up period. Six other people who had been identified in the application acted as project director initially but did not continue in that role officially.

The provisions for salary and the PIP specifications for the amount of time PIP directors were supposed to devote to project tasks may have been reasons why the original district officials did not continue to hold the title. Several of them continued to perform some of the PIP project director functions, thus changing the nature of the PIP-specified roles.

All of the PIPs specify or imply roles for project directors, lead teachers, or tutorial supervisors, and other project members. The project director is supposed to hire all instructional staff, teachers, and aides according to the qualifications listed in the PIP. Hiring was considered important in establishing the project director's leadership role in the district, especially vis-à-vis the project staff. Principals of participating schools were to be oriented to project goals by the project director so that they could become involved in or informed of decisions, interested in the projects slated for their schools, and accepting of project staff members hired by the project director. Project directors were expected to use district personnel procedures for hiring teachers and aides, but the autonomy of the project director in PIP matters, including authority over his staff, was considered necessary for the project to function as an integrated whole within schools under leadership other than the principal's.

The project director is to administer the budget for the project. Within district procedural regulations or requirements for approval, the PIPs assume that the project director will have decision-making authority, will maintain the budget records, and will process ordering of materials for the project.

The project director is responsible for public relations for the project and is expected to be a coordinator between project and non-project staff.

The project director does not have a direct role in instructing children but does oversee the instructional process and is considered the instructional leader. The director's classroom management role varies among PIPs. In some (e.g., Conquest), the project director is expected to maintain close supervision and in others (e.g., Catch-Up, IRIT), the teachers are given more freedom to implement innovative techniques. Pre-service and training of instructional staff is also a role of the project director, although several PIPs suggest consultants be invited to offer training on certain skills or materials.

Four of the PIPs (Catch-Up, IRIT, PTR, and Conquest) specify a lead teacher for the instructional team who also acts as a second for the project director. In Conquest the lead teacher is referred to as the supervising clinician, and in PTR as the tutorial supervisor. The lead teacher is expected to become knowledgeable of the program and assist in the training conducted by the project director. Other roles specified for the lead teacher are (1) assist in establishing communication, (2) ordering materials, and (3) assisting teachers with problems.

Hiring

Of the 19 project directors, only 7 hired their own staff. Four others either submitted recommendations to district administrators or had the right to reject teachers hired by the district. Eight of the project directors had no role in hiring the staff.

In six of the project sites, the federal programs director or the district reading coordinator, rather than the project director hired the staff. In several of these, instructional staff was hired before the project director was appointed. Of course, in the original programs the project directors were district administrators at this level, whereas in the PIP field-test sites, project directors were generally lower in the district hierarchy. In the smaller field-test districts, the reading coordinator or federal programs director often was himself the project director.

On the Administrative Staff Questionnaire, only 23.5% of the project directors reported sole responsibility for hiring. However, 72.7% of administrators, 82.4% of project directors, and 78.2% of principals stated that PIP staffing procedures were well described in the PIPs.

In two of the three IRIT sites, the district reading coordinator, rather than the project director, hired the staff, and at one of these sites no lead teacher was designated although this role was specified. In the third IRIT site, the project director hired the staff but designated no lead teacher, her reason being that her own office was in the same building as the IRIT classrooms.

Whereas the PIP hiring specification for PTR states that the project director will hire the tutorial supervisor and then recruit and screen the necessary number of tutors for the project, in one PTR site the tutorial supervisor was hired by the district before the director was hired. At the other site, the project director recruited the tutorial supervisor from the pool of trained tutors.

Project directors hired project staff for three of the five Catch-Up sites. At one of the two HIT sites, the director of federal programs and the acting project director did all the hiring. At one of the three Conquest sites, the project director was only allowed to reject staff members she thought unsatisfactory for the project from candidates selected for her by the district personnel office. At another Conquest site, where reading specialists were on hand and the intention was to incorporate the project into the existing reading program, the minimal hiring of one clinician and several intern clinicians was done by the assistant superintendent and the reading coordinator in the district. At three of the four R-3 sites, principals did the initial recruiting and hiring of cadre staff and aides for the project and at the fourth, the coordinator of federal projects hired the teaching staff.

Other Roles Established

On the Administrative Staff Questionnaire item regarding administering budget for project operations, 14 of the 18 project directors responding stated they were solely responsible or assumed primary responsibility for the project budget. Therefore the majority of the project directors fulfilled that aspect of their role. Two of the other 4 project directors stated they were actively involved and 2 described themselves only as somewhat involved. Correspondingly, only four district administrators responding stated that they were solely responsible for or assumed primary responsibility for the budget.

The project director's role of communicator and coordinator between project and nonproject staff was one of the most difficult of the director's tasks, and one that was least well acommplished. SRI site visitors judged that only five (26%) of the project directors performed their role adequately as described in the package. Success or failure did not appear to have any relation to the particular PIP as each of these five sites involved a different program; nor did it seem to stem from lack of trying. Only 2 of the 19 project directors were rated as not having performed the role at all. In both of these sites the project director was hired late (September) and many of the start-up tasks were performed by district administrative staff.

In 12 of the sites, the project director did attempt to perform the role. In all of these sites, the project director made contact with the involved principals and informed them of the program, but often made little or no contact with the nonproject teaching staff. Lines of communication between nonproject and PIP staff were often from PIP project teachers to project director to principal to nonproject teaching staff, rather than directly between teachers.

As mentioned above, lead teachers are specified for PTR, IRIT, Catch-Up, and Conquest. In both PTR projects, tutorial supervisors were hired who performed their roles as specified in the PIP. In the one IRIT site where a lead teacher was designated, she acted in the role of team coordinator. In the other two IRIT sites no lead teacher was designated. Project directors felt they would be in very close contact with the teaching team and there was no need for a lead teacher. In these two projects the team did not have the autonomy specified in the PIP. In all five Catch-Up sites a lead teacher was designated and in all but one, the lead teacher served as an assistant to the project director. One lead teacher was obliged to take on many of the roles of the project director by default of the person holding the official title. The Conquest projects had supervising clinicians, although only one of them functioned appropriately in that role during the start-up stage.

In summary, the ability of the project director to establish his roles does not seem dependent on the specific PIP. The size and organization of the district, the size of the project configuration, and the traditional roles played in the district hierarchy appear to be the more decisive factors. In those LEAs where district administrators were project directors themselves or where district administrators allowed the project director autonomy in hiring and control of the budget, the project director was able to establish his specified roles within the project.

Staff Qualifications

A strong requirement of the PIPs was the well qualified and experienced staff who could accomplish project goals and could also help facilitate acceptance of the PIP within the school. PIP specifications assumed there would be a pool of highly qualified candidates at each site from which project directors could draw their staffs. Across PIPs, teachers were to be chosen on the basis of certain specified requirements: subject expertise; familiarity with the district; experience in teaching, that is, respect from others in the school or district; and skills, such as recordkeeping and managerial ability. Once such highly qualified staffs had been chosen, it was felt that information in the PIP, together with scheduled preservice and in-service training, would provide project directors and staffs with the remaining skills and attitudes necessary to carry out the exemplary instructional program.

The delay in awarding PIP grants created a time pressure for hiring that was not intended and made adherence to the PIP calendar data for hiring impossible. While the teachers and aides finally hired were, for the most part, appropriately qualified and enthusiastic, there were deviations from the PIP-recommended procedures and a considerable number of problems encountered.

The main staffing difficulty at Catch-Up sites had to do with the necessity for half-day teachers who could use the other half day for planning. Catch-Up teachers are only paid for teaching half-time. In the original, exemplary programs, however, the teachers spent a lot more than one-half day when their planning and preparation time was included. Across field-test sites, pools of highly qualified candidates were not available for half-time work; the personnel available in these sites needed full-time work. Since most of them found jobs to supplement their Catch-Up positions, the PIP was not implemented quite as specified because there was little planning time.

At another Catch-Up site, the hiring apparently went quite contrary to PIP specifications. Certain teachers had lost their jobs because of a cutback in funds. When the PIP grant was received, the director of elementary education hired three or four of these teachers to work in Catch-Up. Since there are three Catch-Up labs, nine teachers are required for a full staff. The remaining teachers were hired by the district reading coordinator who had contacted the personnel office.

At HIT sites, the principal of a participating school is supposed to assign two of his best teachers to the project at the project director's request. At one site, the principals of the two participating schools were not included in the hiring of staff and both remained somewhat hostile to the project. At the other HIT site, the project director did try to follow hiring procedures but found the job made harder when government monitors were called for assistance. The project director, in conjunction with the principal of the participating school, had chosen a math teacher with four years of experience. Upon telephoning for technical assistance on the matter, the project director was told that five to seven years of experience was the specification in the PIP and that she should follow specifications exactly. The project director therefore chose another math teacher who proved satisfactory, but she was never entirely satisfied with the situation. The director of a Conquest project experienced delay in hiring because of the late arrival of the PIP components and because the district wanted a stable student count before extra hiring took place. The project director wanted to hire some of the existing staff into Conquest if they were to be unemployed because of a low student count. Consequently, because the district has a high degree of mobility among its students, the staff was not hired in full until after school had been under way for some time.

At two R-3 sites, because of time constraints, the principals assigned teachers from the regular school staff to the project rather than asking for volunteers from among the incumbent teachers as specified by the PIP. At a third site, the principal announced to the teachers that they could apply for project teaching positions and for the project director's job which would be first offered to those of the staff who applied; yet the project director who was later appointed was not from the participating school. Although short-lived, this appointment created some bitterness among the staff. Another R-3 site had a small seventh grade population and the original staffing plan was not followed. Four teachers were hired; each had an aide. However, two extra aides were also hired because the PIP budget assigned to the site was large. These extra aides performed both project and nonproject tasks.

A hiring problem at several sites was the fact that teachers did not want to leave secure positions to take jobs in a federally funded project that might be discontinued the following year. Many qualified candidates therefore did not apply. On the other hand, some experienced staff were available because other projects were being discontinued. Aides at several sites were hired from a group of previous Title I aides who had lost their jobs when Title I funds were cut.

In spite of all the variation in staffing procedures, data from the administrative questionnaire concerning hiring indicate that only 8.5% of the district administrators and 3.8% of the principals reported "relatively serious problems" connected with recruiting staff. Only 5.7% of the administrators and 1.9% of the principals reported "serious problems" connected with hiring paraprofessionals.

Although the hiring processes diverged from those specified in the PIPs, the outcomes of these processes, for the most part, were project staff who met the qualifications stated in the PIP Staff Qualifications and Preparation Set. The exceptions were one Catch-Up and one HIT project. In the first, teachers were chosen who would otherwise have been laid off. In the second, the teachers were not those most respected by others nor did they meet the experience requirements. Naturally, not all teachers and aides who met the nominal qualifications performed well subsequently, and some who did not meet the specifications turned out to be excellent in the classroom.

Preservice Training

Most of the PIPs suggest an intensive period of formal preservice training for all project staff during the two weeks prior to the fall opening of school so that instructional personnel will be familiar with what they are to do, will have materials organized or prepared for the first several weeks, and will be prepared for the students' arrival. Generally, the PIP-specified training topics include project goals and philosophy; identifying and scheduling participating students; instructional techniques and procedures; selecting, ordering, and use of instructional materials; recordkeeping; and relationships between project and nonproject personnel. In addition, project-specific training topics are suggested in most PIPs.[*]

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[*] The only project that outlines a limited preservice training is R-3, which specifies a two-day period covering only goals and objectives, duties of the project staff, and an introduction to gaming/simulation techniques. R-3 does require comprehensive, weekly in-service training throughout the year, however.

Given the pressures of time, it is not surprising that the formal preservice training of staff specified in each PIP was viewed by most project directors as somewhat less urgent than getting some of their other tasks done; they therefore chose a variety of ways to handle the problem. Over the 19 projects, three general categories of preservice training were conducted: training that was as close to specifications as possible, limited and informal training, and no training at all.

Staff were given preservice training that met most of the PIP specifications in only 3 of the 19 projects. In two of these sites, all of the content areas were covered, but the training was conducted after school started. In the third site, the training was given at the specified time, but training in one of the specified content areas was postponed because the PIP was unclear about the procedures to be followed, and the training was conducted by a school district administrator rather than the project director.

Twelve project directors chose to conduct a limited and informal preservice training in a few of the specified content areas. The topics that were missed in preservice were, at most sites, covered later in inservice training. Since most of the PIPs specify training on some of the very tasks that needed immediate attention, several project directors used the time allotted for preservice in the way that seemed most efficient: they had the project staff work on the tasks that were most important to getting the project started. For example, in several sites, the project staff spent the two weeks before school started identifying and scheduling students, arranging the laboratories or classrooms, and selecting or learning to use instructional materials.

In four sites, project directors elected to ignore the specification for preservice training.

Project directors cited a number of reasons for their decisions to cut back or cut out preservice training. The most frequently mentioned reasons were the constraint of time--the fact that instructional materials were not yet available meant that they could not review techniques that were dependent on these materials--and the vague or ambiguous nature of PIP specifications. Two other factors may explain the sketchy in-service training, however. In their present form PIPs do not give a full picture of the instructional program (staff roles played throughout a period, relative use of various materials and equipment, and the like) or describe an instructional sequence in detail. In addition, a number of project directors were not reading specialists or experienced master teachers. Thus, because the project director oriented himself to the instructional program by means of only the PIP, he may not have had the confidence to instruct the teaching staff about classroom processes.

Ordering Instructional Materials and Equipment

Each PIP specified that the required materials and equipment be ordered and received well before the program began in the fall. The PIP design anticipated that the instructional approach could be learned, in part, from the materials themselves, from publishers' brochures and guidelines, and from demonstrations by publishers' representatives. The packages included much about the philosophy and style of the program but very little on how to actually use the instructional materials and equipment. The programs' instructional approaches therefore could not be thoroughly understood and certainly could not be implemented until the materials and equipment arrived.

The packages contained copies of manufacturers' and publishers' brochures and catalogs describing the major hardware and software items used in each project. This information was also accompanied by information sheets, which gave the name and purpose of the item, name and address of its producer, and sometimes the opinions of original program teachers about its strengths and weaknesses.

In the IRIT, Catch-Up, Conquest, and R-3 PIPs, materials were divided into core and alternative materials. Core materials were defined as "those that the teachers at the original site say every lab should have" (Catch-Up). Alternative materials were simply other materials that at least one teacher had recommended as very useful. In addition, because of the generally individualized, diagnostic-prescriptive nature of these programs, the PIPs suggested ordering additional materials when indicated by the needs of the children. For Catch-Up, alternative materials were emphasized to the point where each instructor was to have a part of the budget set aside for his use. The three lab programs (Catch-Up, Conquest, IRIT) were further instructed to use materials that were distinct from those used in the regular classrooms.

For the tutorial programs, HIT and PTR, the core materials were the whole basis of the instructional program so few additional materials were suggested. In the case of PTR, there was a choice among programed materials so that project materials could be selected to correspond with the basal readers used locally.

By the end of the first year of the field test all projects had obtained materials and equipment used in the exemplary programs and specified in the PIPs. But receipt of materials was not on schedule by any means nor did ordering proceed without difficulties.

The problems were varied and ranged from recommended materials being out of print or not yet available to difficulties in understanding the degree to which projects were required to have all core materials specified in the PIP. The problems can be divided into those that were influenced by the design of the package and those that were caused by the setting of the field-test project. All of these problems were, of course, complicated to some obvious but undocumentable degree by the late arrival of the PIP, which forced program administrators to hurry the process. The delay was so acute that some projects were forced to order materials before all of the PIP components had arrived in order to comply with the recommended program starting dates.

A problem within the PIP that affected primarily the lab programs had to do with apparent contractions in the guidelines. Some of these projects were advised to replicate the core materials (in the exemplary program) but they were also advised to use materials relevant to the children's needs and to the community at large. In addition, one PIP especially stressed the importance of ordering materials that were different from those used in the regular classrooms. No explanation was included in the guidelines as to the priorities of these instructions. The almost universal solution by the sites, after a period of quandary and a few telephone calls for assistance, was to order as many of the materials as their budgets would allow and against which they had no strong prejudices.

A problem common to all PIPs was that the materials description lists often did not specify the appropriate unit or range of the materials to be ordered for various grade levels. In addition, in several cases, the materials were out of print or had been updated, so that it was difficult to identify the corresponding new set.

Other problems with materials guidelines were more specific to individual PIPs. For PTR the PIP did not explain the usefulness of the Alphabet Skills as a part of the program. This material was portrayed as an alternative set of materials rather than as a necessary part for some first graders. For one of the HIT projects a number of pages were omitted from the PIP and therefore the project staff was not aware of the Sullivan reading materials (the core of the program) until halfway through the year.

Although only 11% of the project teachers responding to the instructional staff questionnaire indicated that the materials were described poorly in the PIP, the individual sites encountered a sufficient number of problems to indicate that the PIP guidelines for the ordering of material and equipment would have to be improved before they could ensure the implementation of appropriate ordering processes.

The difficulties caused by the location of the individual projects or by local circumstances were more project specific. At several locations some of the recommended materials were nearly impossible to get because of the lack of manufacturers' or publishers' outlets in the area or state. A similar difficulty was caused by the remoteness of some of the sites. Often it was difficult to entice a publisher's representative to visit the site. (At Catch-Up 2 the representative's excuse for not showing up for the second time was that he couldn't find the town on the map.)

Most of the aforementioned difficulties were resolved by at least the middle of the school year. The main effect was that the problems delayed full implementation of the instructional program. Careful revisions in the PIP design could lessen these difficulties but not eliminate them completely.

It is clear from the experiences at the field-test sites that major improvements in the Hardware/Software Packet are necessary. Continual (at least yearly) updating is required to ensure that only currently available materials are recommended. Some mechanism outside of the present PIP concept will have to be established to handle updating of materials. It should be pointed out, however, that changes in recommended materials mean changes from the materials that were part of the original, effective program. As materials become more and more unlike those used in the exemplary program, the notion of program "replication" becomes confusing.

Procurement of Facilities

Specifications in every PIP for obtaining facilities include (1) a description of the facilities required, both physical space and classroom furniture and decor; (2) a timeline for obtaining facilities; and (3) personnel to be involved in obtaining and in utilizing the facilities. Facilities include all rooms or space with associated furniture, shelves, blackboards and bulletin boards, and noninstructional equipment, such as filing cabinets, carpets, carrels, and the like. The principal goal for procurement of facilities is to acquire the items needed to implement the instructional program successfully while maintaining good relations with school and district staff.

In general, the PIPs recommend that a survey of the district be made during the spring so that the project director will know if furniture and equipment are available or if it is necessary to order them. During late summer the final arrangements are to be made and by early September everything should be available for use by the project staff. PIPs also recommend that the school principals be contacted and involved in the facilities acquisition process from the beginning (even in the selection/adoption stage).

Space for reading and math instruction is to be well illuminated, well ventilated, and have basic classroom furniture, such as desks and bulletin boards. Some PIPs provide suggested floor plans. For the lab programs, such as Catch-Up, Conquest, and IRIT, the PIPs specify that the rooms be colorfully decorated and have bookshelves, filing cabinets, tables (generally round), and carrels. R-3 specifies informal groupings of furniture, carpeting, and space for a mimeograph machine; Catch-Up recommends carpeting also. PTR requires the least elaborate instructional facilities since the tutors' materials are portable and a hall or the back of a classroom is adequate for a tutoring session.

All of the PIPs recommend that fully furnished and equipped office space for the project director and secretary be provided from local funds. R-3 and IRIT also require a meeting room and office space, respectively, for their teachers. Desks or work space for the instructional staff, within the labs, is specified by Conquest and Catch-Up.

The PIP concept assumes that by the end of the selection/adoption stage districts have made decisions with full knowledge of their responsibilities in terms of allocating adequate facilities to meet the specifications of the PIP. Since the hypothesized selection/adoption process did not occur in this field test, some districts had problems meeting the PIP specifications.

None of the projects was able to follow the timelines suggested in the PIPs since the packages didn't arrive until the summer, although most of the sites managed to obtain adequate facilities by the time students entered school.

The greatest problems were noted in three R-3 projects and one IRIT and one Conquest project. In one R-3 site, a project teacher was not given a room and consequently floated between two rooms for the first few months. In another R-3 site, classrooms were scattered in different wings of the school building and some teachers had to share rooms. In this site, the project director and secretary, who should receive a fully equipped and furnished office together, were split up until February and the secretary was given a corner in someone else's office with only a typewriter and table, while the project director was given a small reading room in the media center someplace else. In this site an adequate number of chairs was never available. Two R-3 projects had problems with classroom space and with the purchase of the carpets required. Since the R-3 program requires a cadre of new teachers and a low student-to-teacher ratio, the late date of the PIP grant made it extremely difficult to reassign school space.

IRIT projects had a similar problem in that three adjoining classrooms were required for three new teachers. In IRIT 3, the three classrooms were not available in the schools involved; a large partitioned room in one school was used instead and it proved adequate. Furniture for the classroom was not available and thus had to be ordered. Since ordering occurred late, arrival was late, and the beginning of the instructional program was delayed. In this site, the delays caused by installing carpeting, which is not specified for IRIT, and painting the project room further delayed the instructional program.

In most cases, the project director and principals worked together in allocating space for the projects. In one Conquest site, the project director had some problems obtaining adequate facilities because cooperation from the principals was not obtained. Although district administrators in this site felt that space was available and the project needs were great, two of the three principals had already made plans for their space prior to September. When the district administrators gave Conquest a high priority for these schools, the principals felt that their autonomy was being usurped because of the project. They did eventually allocate some space in their buildings. In two IRIT projects it was not necessary to involve school principals in arranging for space because there were surplus buildings in the district. It was however, important to inform them about where project participants would be bused.

In spite of some major problems at a few sites, answers to questions on the ASQ indicated that 57% of the 137 respondents felt that there were only minor or no problems in obtaining facilities. Observations made by site visitors indicate that most of the projects were able to obtain good facilities by the time the students were ready to occupy them. According to an observer from RMC, who had had the benefit of seeing both the exemplary and the field-test Conquest projects, in some schools at each of the three Conquest sites, the facilities of the field-test project were superior to those in the exemplary site.

Orientation of Nonproject Staff, Parents, and Community

The PIPs describe orientation processes that had proved to be successful in the original projects. All of the PIPs recommend beginning comprehensive orientation programs for classroom teachers, principals, district personnel, and parents early in the spring prior to the school year. Use of PIP materials such as the filmstrip, viewfoils, brochures and project overviews are recommended in all of the PIPs. The principal goal of the orientation processes is to inform all parties who will be involved in implementation, and about the goals and philosophies of the project so that they feel involved in its success and have supportive and enthusiastic attitudes toward it.

Nonproject personnel should be familiar with major components of the program and their roles in relation to successful implementation of the project. While the PIPs do not provide guidance for eliciting parent and community participation, they state that their support is important to the success of the project.

All of the PIPs specify that parents should be oriented to the project by the project director, either before school starts or early in the school year. Three of the PIPs (Catch-Up, Conquest, and PTR) specify establishing parent advisory boards. The three remaining PIPs (HIT, IRIT, and R-3) merely advocate obtaining support and cooperation.

Only a small number of principals of the schools involved had a satisfactory orientation but most had at least a superficial understanding of project goals, philosophies, and instructional techniques to be implemented. Contrary to specifications in the PIPs, many project directors assigned orientation of the classroom teachers to the principals beginning with their first teachers' meeting of the year. When asked about their involvement in orientation of school personnel, 44% of the 52 principals sampled said that they were not involved and an additional 33% felt that they were either minimally involved or just kept informed of what was taking place. This discrepancy between what was expected of the principals by the project directors and what principals felt their role in orientation to be may be the reason for the extremely poor results reported on the orientation of classroom teachers.

Of all the groups that were to be oriented, the nonproject classroom teachers were involved least, and in all of the PIPs they are considered one of the most important groups to work with to ensure project success. During start-up the project directors seemed to neglect orientation of nonproject teaching staff. Methods used to involve nonproject staff in orientation meetings contributed to the failure of this process in many sites. Many of the project directors scheduled presentations to which parents, classroom teachers, and the community were invited. PIP orientations given during the after-school hours were not appealing enough to attract most classroom teachers. Unlike the principals and district administrators, nonproject teachers complained of the inflexibility of their daily schedules. Finding time for orientations to the PIP for this group requires extra efforts during the planning stage and demands some modification of the teachers' general routines.

One IRIT project was an exception to the general rule of poor orientation. In this community there was a gallant and partially successful attempt to orient the nonproject staff. Initially, classroom teachers were oriented through a district-wide meeting. Then the three IRIT teachers were each assigned a school in the early part of the year and served as a liaison between IRIT and the sending classroom teachers. (Special group meetings were also held by the district reading coordinator periodically to keep sending teachers informed.) In spite of the involvement of the IRIT teachers in orienting nonproject staff, both groups felt that they had not done enough. Their involvement allowed them to see the importance of staff relationships and supportive attitudes and good public relations.

Information about the projects was disseminated in the district at large through informal conversations, meetings, and informal gatherings. This was especially true when the replicating site was in a small town. In the larger cities the orientation of district officials seemed less important because their involvement with the project was usually very limited. Results of the administrative questionnaire indicate that in spite of the minimal job done in orienting district administrators 88% of the 35 respondents felt that they had a good understanding of the organization and management of the PIP and 71% felt that they had a good understanding of instructional techniques of the project.

Eliciting parent participation in the programs and favorable public relations was generally put off until the operations stage was in effect. These subjects are dealt with in the Operations section of this report.

The use of the PIP orientation materials varied from site to site. However, the most widely used material for the purpose of orienting nonproject personnel was the filmstrip and accompanying cassette tape. With the exception of three sites, the filmstrip was used in every project. Most project directors also liked and used the flyers, which presented a brief overview of the projects. The viewfoils, charts, and other display materials were used less often by the project directors.

There are several explanations for the generally poor orientation of nonproject groups. The first is that the PIPs did not have enough rationale nor did they provide enough specific suggestions for orienting each group to the project goals and to their roles in achieving them. Had project directors in the field-test sites been as experienced and skilled in public relations as the directors of the original, exemplary projects, they probably still would not have been able to improve their performance a great deal. Unless a person has operated a project and seen the instructional program in operation, it is difficult to convey to others what it is really like. And with the PIP components arriving piecemeal just as the project staff was being hired and trained, the project directors did not gain the thorough understanding nor have the time that was required to orient others adequately. R-3 project directors for example were somewhat confused about how the project was to be implemented. The R-3 program is a complex one and cannot be readily absorbed. It was difficult for the project directors to orient the nonproject staff when they were not comfortable with the gaming and simulation techniques, the curriculum materials from the original site, or the suggestions for integrating subject matter disciplines around relevant themes.

Except for stating its importance, the PIPs treat the development of favorable public relations with the community very lightly. For example, the Conquest PIP states that the community should receive periodic reports on project accomplishments, the IRIT PIP states that the project director should inform the community of the structure and objectives of the program, and the R-3 PIP states that good public relations are essential to program success. Newspaper coverage appears to be the primary means suggested for establishing favorable public relations.

All project staff acknowledged the emphasis placed on soliciting parent participation by the PIPs. In most projects parent orientation meetings were held much later than was specified in the PIPs. This was partially due to the late arrival of the PIPs and the immediate emphasis given to implementing the curricular aspects of the programs, but there was also a desire on the part of project staff to have a moderately well established and functioning program for parents to see on their initial introduction.

Selecting Students

The target group for all PIP projects, except R-3, was socioeconomically disadvantaged children who were performing "in the lowest quatrile" or "below grade level" in reading or reading and mathematics. Except for PTR, the PIPs were validated in school districts that were economically depressed and attended predominantly by minority students.

Selection of participants, as specified in most of the PIPs, was to be based on test scores from the previous year and teacher recommendations; PTR and R-3 were the exceptions. Since PTR was designed for first graders, the PIP specified that a reading readiness test be administered to all first graders shortly after the school starting date for the purpose of identifying eligible PIP participants. In R-3, once the school was selected, all seventh graders were eligible for participation. In addition to the general selection criteria, each PIP specified other priorities and gave detailed instructions. Conquest specified selecting first grade students who had been retained from the previous year, and IRIT specified that PIP teachers conduct the final selection of students from candidates provided by the sending teachers. In HIT, tutors were to be selected by the PIP instructional staff on a volunteer basis. They were to be seventh and eighth grade students scoring one or more years below grade level on a standardized test. Tutees were to be selected if their performance was 1-5 years below grade level and if they did not respond well to regular classroom procedures. Tutees were to be matched with tutors who performed approximately two grade levels above them on tests. It was implied in all PIPs that acceptance of the program by parents was a final selection criterion.

Results of the Administrative and Instructional Staff Questionnaires indicated that criteria and procedures for selecting PIP participants were well described in the PIPs. Of 78 administrative respondents, 62 (80%) felt that the packages described selection criteria and procedures well. Sixty-four percent of project teachers felt that selection criteria and procedures were well described.

The children selected to participate in each project were for the most part socioeconomically disadvantaged and, except for Catch-Up projects 3 and 5, students on the average met the PIP specifications for inclusion (i.e., children placed in the bottom quartile or below grade level on tests with grade equivalents, as specified). Since Catch-Up projects 3 and 5 are quite small, it was not possible to come up with the necessary 64 students all of whom performed below grade level (e.g., there were only 88 children enrolled in the entire school in which Catch-Up project 5 was implemented).

Although selections were congruent with PIP specifications, in many cases the students selected were not the most economically disadvantaged children in their communities. Contrary to USOE's expectations, PIP projects were not used to replace the existing compensatory education programs in the district. Since the existing program was usually supported by Title I funds, the Title III PIP grant was viewed by LEA staff as an opportunity to give the next layer of students some special help. Although the original programs were Title I-supported and although Title I seemed the most likely source of future support of PIP projects, there was no way for federal officials to require that Title III funds be used for the Title I-eligible students only.

The participant selection procedures recommended in the PIPs were followed in most sites to the extent feasible, given the time constraints. Conquest 3 was an exception since selection was dependent more on the compatibility with several existing local reading programs than with PIP guidelines.

All of the projects utilized test scores in the selection process. Test scores became the major determinant and in some cases the sole determinant in selecting participants. Six of the projects did not use teacher recommendations as a part of the student selection process.

When asked on the ISQ what changes they would make in the selection process, teachers indicated some dissatisfactions. Of 118 responding, 36 project instructional staff felt that either teacher judgments should be considered, that students should be selected based on criteria other than test results, that there should be more students allowed to participate, that only those children who needed remedial help should participate, or that additional grade levels should be included. Out of 182 nonproject respondents, approximately 43 felt the same way. As might be expected, nonproject respondents were more concerned with teacher recommendations and less with test results as selection criteria.

As noted previously, the Conquest PIP specified that children who had been retained from the previous year should be eligible for participation. This criterion appeared to be inapplicable since the districts in which Conquest projects are located have a policy of not retaining children.

The selection of tutors in the HIT projects was completed in part on the basis of PIP specifications, i.e., project teachers sought seventh and eighth grade students who were one or more years below grade level (but 2 years above the level of tutees) who were both enthusiastic and willing to volunteer their time. In both HIT projects the project staff was unable to enlist a sufficient number of volunteer tutors who met the PIP specifications. In HIT 2, the project staff resorted to pressured volunteerism. Both projects appeared to have difficulty in maintaining a sufficient number of tutors.

The final selection criterion, as implied in most PIPs, was one of parental acceptance. Most parents were notified of their child's or children's participation following participant selection procedures. Results of the ASQ indicate that there was very little objection (or concern) on the part of parents about their child's or children's participation in the program. Four of 16 project directors responding to one question acknowledged that parents had asked that their child (children) be removed from the program. The number of parents requesting such was quite small (in two cases only one set of parents was concerned, and in the two other cases, up to five sets of parents may have been involved). Of the 43 principals responding, four also acknowledged that parents had asked that their child (children) be removed from the project. In three of the four cases, only one set of parents was concerned. Across all PIP projects it was reported on the questionnaires that only one child was removed from a program at the request of the parents; in the rest, the principal or project director was able to reassure the parents and convince them that the program was to their child's advantage.

Scheduling Students

Since the PIP projects were supplementary to the regular classroom activities scheduling was a critical element. Although the PIPs were sometimes ambiguous on the topic, it was generally assumed that participants would not be scheduled to attend instruction during regular reading or math classes. One exception was IRIT where PIP-specific instruction consumed three hours each morning over a ten week period. In Catch-Up, Conquest, HIT, and IRIT projects, scheduling was to be done jointly by PIP instructional staff and regular classroom teachers. In PTR scheduling was to be done by the school principals. In R-3 the classes were to be heterogeneously grouped and scheduled by the project director and school counselors.

During the start-up phase, scheduling appears to have been a major problem in many of the projects. This problem was due largely to late arrival of the PIPs, and was aggravated by the fact that scheduling is a task usually completed before the beginning of the school year. Regular school schedules were partially established, if not finalized, before school officials were aware of the logistic requirements of the PIPs to be implemented in their schools. Scheduling was, in general, expedited in the most efficient manner and quite often by staff members other than those designated in the PIPs.

R-3 projects had the most difficult rescheduling problems because it was a junior high school program. Scheduling by computer had already been completed in the R-3 (4) project when the PIP arrived. New class durations, student-teacher ratios, and other PIP specifications meant that entirely new schedules had to be created. These were created by the project director himself. Student grouping in R-3 (1) was done alphabetically by school officials, and then students within classes were heterogeneously scheduled on the basis of their diagnostic test results.

Next to the R-3 projects, the laboratory projects (Catch-Up, Conquest, and IRIT) seem to have had the most difficulty with scheduling. Several Catch-Up projects established schedules quickly and then informed both project and nonproject instructional staff after the fact. In a move to limit foreseeable problems, the IRIT 2 project director made an effort to schedule each cycle of participants from the same school, rather than distribute each school's delegation of participants across the school year.

HIT project staff reported that scheduling was the most serious problem they encountered because regular schedules had been finalized and the PIP required large numbers of tutees and tutors to be pulled out for each of the five daily half-hour tutoring sessions. In order to accommodate the PIP program, HIT 1 resorted to doubling the specified number of tutees and tutors for each of the half-hour tutoring sessions.

In general, regular classroom teachers did not understand the scheduling rationale (e.g., why children were pulled out of specific subjects, why children moved from one classroom to another at 40 minute intervals, and so on); nor did some see the program as a supplementary rather than replacement program. This misunderstanding was partly due to poor orientation.

One of the causes of difficulties was the contradiction or ambiguity in the PIP specifications. Staff in three PIP projects complained that PIP specifications for scheduling were unclear. In Catch-Up 1 and HIT 1, USOE advice was sought in clarifying PIP scheduling.

Information obtained from the ASQ substantiates the difficulties encountered in scheduling. Forty percent of the project directors responding felt that either very serious problems (22.2%) or relatively serious problems (16.7%) were associated with scheduling. Only 10% of the school principals responding felt that there were relatively serious or very serious problems, and 35% felt that the problems were relatively minor. The responses by school principals may indicate that the questionnaire was answered several months after scheduling was completed; scheduling is one of many problems that principals deal with on a day-to-day basis and thus is not particularly different or significant. The responses may also indicate that many of the schedules were dictated by the principals who (1) were not aware of discontent, problems, and other factors, or (2) did not wish to acknowledge the problem.

According to the results of interviews conducted throughout the year with both project and nonproject administrative and instructional staff, scheduling continued to be somewhat of a problem throughout the school year. For example, the PTR 1 project revised its scheduling procedure at mid-year, in one of two schools, so that all participants from each class were pulled out as closely as possible to the same time rather than throughout the day. The regular classroom teachers felt that pulling children out of their classes throughout the day was too disruptive of the regular classroom schedule. In R-3 (2), rescheduling became necessary because several parents objected to one of the project teachers. The remaining project teachers took on additional students and duties. Finally, a general misunderstanding about when PIP participants should be pulled out of the regular classroom continued in several of the PIPs throughout the school year. Not realizing that the PIPs were supplementary programs, nonproject teachers had a tendency to favor pulling PIP participants out of the regular classroom during reading or math because those subjects are what the PIP program was emphasizing.

It was not clear in Catch-Up or Conquest PIPs that students were to remain in the project for the entire year, and USOE intervention was necessary to prevent replacement of students who were showing improvement by others whom teachers felt could benefit.

When asked on the ISQ if PIP activities were disruptive of regular classroom activities, nonproject instructional staff members did not feel strongly on the subject. Out of 240 responses, only seven strongly agreed and 16 tended to agree that PIP activities were disruptive of regular classroom activities. Fifty reported mixed feelings and 20 reported no basis for response. When asked if nonproject teachers were reluctant to release the PIP participants for PIP activities, approximately 10% of both project and nonproject teachers felt that they were reluctant to do so. On the other hand, 66% and 62% of project and nonproject teachers, respectively, felt that there was no problem in releasing PIP participants. When asked if PIP participants were being handicapped by missing other curriculum while participating in the PIP program, approximately 12% of the nonproject teachers felt that they were, whereas only 3% of the project teachers thought so.

Summary of the Start-Up Stage

The short period of time between grant award and the beginning of the school year, in addition to the confusing introduction of the PIPs into sites that were quite different from the original sites, made it difficult for project directors participating in the field test to implement the start-up activities as specified. Nevertheless, almost all tried to compensate for the difficulties and worked hard to achieve the results desired through the PIP-specified manner. Thus, by the beginning of the school year or a few weeks thereafter, the main elements of the projects were present. The project staff, most of whom were appropriately qualified, were on hand, though not too well prepared for the instructional tasks ahead. Classroom and other facilities were already provided with some of the required PIP equipment and many of the instructional materials. Appropriate student selection was accomplished in most sites by the first few weeks of school. Nonproject personnel were at least aware of the new project in the district and knew which of their students were to participate.

The impacts of events in the selection/adoption stage were felt during the start-up stage. Since the LEAs had not chosen the program that fit their needs exactly and since USOE could not find very good matches in terms of school district context, the start-up stage of the PIP projects underwent some adaptations beyond those necessitated by the shortage of time. The importance of adhering closely to PIP specifications (for the purpose of replicating practices in the original site) was not acknowledged by project personnel, and thus they made adaptations which appeared necessary to them in order to mobilize the instructional program on time. In modifying the start-up procedures, sites having more experience with government programs were quite conscious of the sanctions associated with the Title III grant. These project directors called program officers in USOE at least once during start-up for clarification of guidelines or permission to modify or deviate from the PIP specifications.

The size of the districts was one contextual factor that turned out to be important. Besides affecting the configuration of the project that was adopted, district size interacted with the specifications in the PIP to affect the role of the project director. In small rural districts, project directors were usually people with autonomy and authority similar to that of the project director in the original site. They had participated in the grant application and assumed the role of project director. In all but one large city district, the person assigned to be project director was given sufficient autonomy in hiring and budget matters to conduct the project. To meet the PIP and grant requirements, however, several districts of intermediate size appointed a nominal project director who was not actually in charge of conducting the project. The higher district administrator retained control of the project and performed training, orientation, and staff hiring roles; the role of the project director was to assist and serve as resource person.

Operations Stage

In this section, we report the implementation of the PIPs for the operations stage of the projects. We divide project operations into two general kinds of activity: the instructional program and the continuing project management activities.

Our report on the implementation of the PIP instructional programs is based on the data collected by means of the observation procedure during the February site visits and also by informal interviews and observations throughout the operations stage.

Implementation of the Instructional Programs

Each of the PIPs specify certain arrangements of facilities and equipment. Each of the PIPs also describe some of the instructional groupings and activities that were observed in the original exemplary program. Such activities were: students working under contracts (R-3), students using Systems 80 teaching machines (Catch-Up and Conquest), students recording points in "bank books" for material rewards (HIT), and the like.

For the three lab programs (Catch-Up, Conquest, and IRIT), the core instructional materials are listed, but the use of the materials is at the discretion of individual teachers. The instruction is to be geared to the needs of individual students, and some commercial series of diagnostic and prescriptive materials are recommended to help the teachers with instructional sequencing. The materials for instruction in R-3 are to be adapted to the local site by teachers, and instruction is dependent on planning by the teaching staff. The instructional episodes themselves are to be controlled to a large extent by the students and the subjects being pursued. In both PTR and HIT PIPs, the specified materials are programed texts for tutors to follow.

The PTR and HIT packages are the only ones that can be said to specify a set of appropriate instructional sequences. In the rest of the PIPs, there are no detailed recommendations for teaching, few suggestions for use of various curriculum materials and few descriptions of typical teaching-learning sessions. Armed with the Student and Professional Relationships Guides, their cursory preservice training, and faced with a classroom full of assorted materials, the instructional staffs at each project were supposed to bring about the effective program for the students.

Narrative descriptions of instructional program implementation for each PIP appear below. Following that, quantitative data from the observation instrument are displayed; PIPs and sites within PIPs are compared on degree of implementation.

Catch-Up

By the time of the systematic observation in February, the Catch-Up project labs were unquestionably replications, in terms of meeting specifications in the Catch-Up PIP and capturing the philosophy described. In the five sites, the program concepts and content were endorsed with enthusiasm by the instructional staffs. In terms of facilities, six of the seven labs were difficult to distinguish one from the other. Only one site did not look exactly like the others and this was simply due to the fact that the lab was located in an old house rather than being a one-room lab in a school setting.

All of the sites had the basic materials such as Random House Criterion Referenced Reading, Sullivan Math and the Systems 80 machines. Staff time required in the early months simply to learn which materials were relevant to which skill areas was nearly overwhelming when up to 15 sets of new materials were to arrive. At the time of lab observation, the struggle to master the curriculum materials was no longer evident.

There were some variations in equipment or materials used because a manufacturer's representative was unavailable or because of objections to certain materials.

The Catch-Up philosophy makes it clear that it is a program based on meeting the individual needs of each child in the program. In pursuing this program goal, teachers were sometimes brought into conflict by the notion of PIP replication and the pressure to adhere to "core materials." By February of the school year, however, most of these contradictions had been resolved at each site, and staff members were relaxed enough to concentrate on the needs of the children.

The positive resolution of the problems the labs faced together with the fact that all of the sites were equipped with materials and staff essentially similar to the original site as described, make it clear that the Catch-Up program, as specified, was implemented in the five new sites.

Conquest

Of the three Conquest sites, two were successful in implementing a learning environment that met the physical specifications described in the PIP. Some variation existed between labs observed from school to school, even within sites, but these were anticipated in PIP guidelines. The project directors and staff in the two successful sites equipped all of the labs with the same materials and equipment. The two directors independently developed the same system of rotating shared materials to all of the labs where there were not enough items for everyone. The PIP specified an attractively decorated facility furnished with tables, carrels, and storage space. The two successful sites did indeed have all of these things in their laboratories.

The third site was peculiar in that the district already had a special reading program and geared its efforts toward integrating Conquest with this program. The district staff apparently felt that their existing centers adequately met their needs. Evidence from the other two replicating sites indicated that this project could have achieved the same success in replicating the specifications for the physical environment, as did the other two, if the same effort had been put forth.

It is not easy to compare the instructional programs at the three tryout sites with the specifications described in the PIP because the instructional methods were not described at a very detailed level. Instruction in the three sites reflected three interpretations of the PIP specifications. All of the centers in the two successful sites used the same approach in structuring each child's program around the same skill areas: comprehension, programed reading, and phonics. These skills were taught through the use of commercial teaching materials, teacher-made materials, and commercial teaching machines. Grouping patterns usually reflected the preferences of the individual teachers. All of the teachers at the two sites attempted to individualize their students' program after conducting the PIP suggested 17-step diagnostic procedure. In both sites, teachers complained of not having a good feel for the students' needs even after having gone through the prescribed steps. They resolved this problem by turning to commercial criterion-referenced materials, district criterion-referenced materials, and their own experiences.

Site 1 had labs most closely resembling the instructional program as described in the PIP. They used the carrels, diagnostic-prescriptive approach, students received remediation in several skills daily, and a core programed reading series was used.

In Site 2, the carrels were not used until March and there was no core programed reading series. They did however employ a diagnostic-prescriptive approach, and gave the students individual remediation in several reading skills daily. Both of these sites kept students in their program for the entire school year where they received 4-1/2 to 5, 50-minute sessions per week. The differences between these two sites seem to be due in part to the fact that the PIP allowed for free interpretation of instructional specifications. The nature of the differences in the instructional programs seem to reflect the management style and professional preferences of the project director.

Differences in management style and professional preference can also be applied to the third site to explain its adaptation of the PIP instructional program. However, there are contextual factors which are at least equally important in explaining their program and its wide variation from school to school within the site. Even with the small effort made by the third site in adhering to PIP specifications, there were some similarities between their instructional program and the other two field-test projects. There were multiple skills taught most days and students generally were instructed daily. The diagnostic-prescriptive approach was used although not guided by the materials and systems specified in the PIP. This was the only project which lacked a consistent structure across its laboratories and this tended to detract from the "projectness" aspect exhibited by the other two projects and stressed in the PIP.

HIT

Facilities at HIT centers at both tryout sites were satisfactory according to HIT specifications. HIT requirements are simple in this regard: tutoring desks where tutor/tutee pairs can sit and work together, a desk each for the teacher and two aides, bookshelves and cabinets where Sullivan workbooks and other PIP specified materials can be stored, and a table for games or where materials can be set out each day for the students. The decor of a HIT center is left to each staff's discretion. The PIP states only that charts pertinent to the subject matter may be displayed on the walls.

Materials for HIT are mainly the criterion-referenced Sullivan workbooks, texts, and tests; drill materials such as Hegge, Kirk & Kirk for word drill and flash cards for math; games; and teacher-made materials. Both sites implemented this area adequately in spite of the fact that the Sullivan supplier for both sites did not deliver required supplies on time.

While both HIT projects had to compensate by using other materials, they began using the required materials (sometimes retaining the substitute materials in addition) as soon as they arrived.

Implementation of the instructional procedures varied considerably between sites. The differences lay primarily in each center's instructional monitoring and tutoring practices. This was partly due to lack of detail in the PIP and partly due to poor communication between center staffs and the fact that personnel did not visit each other's tutoring sessions.

Although the HIT PIP describes the general structure and organiaztion of a HIT tutoring session very well, it does not describe in enough detail the intense pacing of the tutees' drilling procedures or the consistently attentive and supportive quality of the instructional adult staff.

One center group at one of the sites seemed to have genuinely caught the philosophy as well as the letter of the directions in the PIP better than the others. Adults in this center were attentive to students' academic needs and problems. Tutees drilled and were occupied with workbooks while tutors tallied correct and incorrect answers. There were few discipline problems.

While HIT centers were implemented in terms of facilities and materials, their instructional programs, while meeting the PIP specifications, had only a superficial resemblance to one another. Beyond the explicit PIP specifications, interpretations of appropriate instructional program activities seemed to be influenced by project staff members' unwillingness to relinquish the traditional "teacher" role.

IRIT

During SRI site visits in February, fully implemented IRIT programs were observable at all three sites. The basic IRIT classroom configuration was followed and this resulted in strong project resemblance across the three sites: three classrooms, each with a teacher who was instructing in a specific area of reading, and groups of 15 students in each classroom. At all sites the atmosphere was similar, with children pursuing their own activities. IRIT philosophy allows for a great deal of teacher creativity in the use of materials, and also emphasizes individualization to each student's particular needs. These aspects of the program were observed at all sites; one site was particularly exemplary.

All IRIT sites followed the PIP specifications in establishing facilities for their programs. The space in a partitioned double-sized classroom occupied by one project was adequate, although larger rooms would have been desirable. While none of the sites was able to locate the programs in classrooms within an operating school, adequate, appropriate facilities were found.

The classroom furniture at all sites was adequate. Table and chairs rather than individual desks were mainly used for students. Arrangement of furniture in all nine IRIT classrooms at all three sites allowed for students to work independently. New round tables or colorfully painted old desks made IRIT classrooms attractive, as specified.

In spite of problems in sending school schedules, school bus service and weather conditions, all three sites followed the IRIT schedule which specifies a full morning of instruction in three 50-minute sessions for a 10-week period.

Following the PIP specifications, a wide variety of materials were present at all sites, and these were mainly the commercial materials recommended in the PIP. Some additional materials, not mentioned in the PIP, were also being used. IRIT encourages teacher creativity in the use of materials, so additional material was to be expected in the centers. The teachers felt that the quality of commercial material available to them was very high and chose to use their planning time prescribing the proper materials for individual students rather than developing their own materials. Some teacher-made instructional games were used though.

In all IRIT sites, students worked independently or in small groups. The IRIT teachers would monitor the students work, circulating around the room and working with individual students throughout the period. Students were task oriented and very few disruptions were observed. At all the sites, each group of IRIT teachers instructed in the three appropriate skill areas of reading as specified. The teachers would use different materials and at the same time attempt to coordinate their curriculum in order to meet the needs of individual students.

PTR

Both PTR projects looked exactly as one would expect from reading the descriptions and specifications contained in the PIP. In both cases, facilities were set up to accommodate one-on-one tutoring. Although all tutoring facilities were well within the guidelines specified in the PIP, there was variation. In one site, all tutors within a school were placed in one room. As a result there appeared to be a high level of activity due to the number of tutoring pairs present and the knowledge that they were in a position of being observed by others. In the other site tutoring locations varied from school to school. In some instances, a tutor had one large empty classroom as a tutoring location; in others, two tutors were assigned to a smaller room; and in the open-schools, up to three tutors were closely grouped and sectioned off from the open/free activities area by bookcases. Needless to say, the noise level was higher in the open schools. Overall, the general atmosphere in the first site appeared to be more positive, alive and bright than in the other.

As can be expected, both projects implemented aspects of the PIP that were well documented or stressed, and tended to vary on aspects that were not well documented or stressed. For example, both projects adhered to the clearly specified one-hour lunch period even though it caused some negative comments on the part of regular classroom teachers who got only one-half hour. In terms of frequency of instruction, however, there was some variation. Although the PIP specifies that each tutor will serve approximately three tutees per hour, it provides no more specificity. Thus, one project provided 15 minutes of tutoring per day to each tutee, but none of the tutees were tutored more than once per day or longer than the designated 15 minutes. If a tutee was absent, the tutor simply waited for the next 15-minute tutoring session (since all tutors were located in the same room in this site, the time of tutoring sessions were tightly adhered to). In the other project there was a tendency to go beyond the designated 15-minute session.

Once the specified materials became available, they were used properly according to PIP specifications. In one project materials selected to be used were available prior to the implementation phase so there was no transition necessary. Unfortunately, in the other project, the selected materials were not available from the publisher until January 1975. Hence, alternative types of materials available in the school districts were used. These materials were presented on a one-to-one basis and in a fairly structured manner, but they were not the PTR-specified materials.

Staff in both PTR projects felt that the tutoring kits were too advanced for some of their slower students. After consulting with the originating site, and upon closer examination of the Hardware/Software Packet of the PIP, both project staffs realized that there was one additional "experimental" set of materials (Alphabet Skills Book) that could be used. A copy of the Alphabet Skills Book was obtained by one project; copies were made and used during the last three or four months of the school year. Because of the late date of its implementation, many of the tutees in this project never advanced to the regular PIP-designated set of materials (tutoring kit).

Although the other project staff demonstrated an interest in the Alphabet Skills Book, permission to use it was not obtained, hence it was not used.

Regardless of the materials used, at the time of observation the tutors were presenting the materials in a structured format as specified by the curricular components of the PIP. The tutorial supervisors in both projects expressed overall satisfaction with the performance of their tutors. Although the materials were generally well presented, there was variation in some of the more subtle aspects of the presentations attributable to personal style of the individual tutors. Since nearly all of the tutors were paraprofessional, had little or no experience in working with children in schools, and were not used to being evaluated, they came off under observation as rigid, somewhat unsure at times, and nervous.

The tutorial supervisors in both projects performed their roles exactly as one would expect upon reading the PIP materials. Since the projects were small, the tutorial supervisors were able to observe tutors more frequently than specified. In one project the tutorial supervisor was able to observe each tutor on a daily basis and in the other, the supervisor visited on a weekly basis.

R-3

Despite initial difficulties with finding enough classroom space for the additional teachers required for the R-3 project, by February all four sites had worked out arrangements in such a way as to provide a classroom for each project teacher. With few exceptions, the classroom furniture and interior arrangements met PIP specifications across all R-3 sites. Hexagonal or round tables were used in all but one of the 32 classrooms and all sites had some classrooms which used learning centers where students either worked on individual assignments or selected a task from a variety of available activities. Site 1 did not order carpeting and was unable to get enough chairs for its students; nevertheless, using individual student desks as chairs around the tables, the staff managed to achieve classroom arrangements that provided the openness and flexibility described in the PIP.

Although the PIP specifies assignment of heterogeneous groups of students to classes, only one site accomplished this part of the program. The other three sites, which had larger student populations, were not able to carry out these specifications. In one project, students were assigned to classes alphabetically and teachers grouped them heterogeneously within classrooms on the basis of diagnostic tests. Two other projects tried to group heterogeneously, but classroom assignments were affected in both projects by the need to keep certain students together to fit in with the schedule of regular classes. The resultant schedules included several classes of students at the same achievement level.

Class sizes were, for the most part, appropriate (up to 22 students) at three sites, although one of these had some classes of nearly 30 students. At the remaining site, class sizes were generally much larger than the program calls for--the average classroom in this project had 26-28 students.

R-3 prescribes a wide variety of instructional materials, both commercial and teacher-made, on educational levels ranging from Grade 2 to Grade 12. Three of the four projects had an abundance of materials for students' use; the fourth ordered and had fewer materials, yet the teachers felt they had sufficient numbers for their use. All projects ordered the contracts developed at the original site, although they were used in different ways by different teachers: some were used intact or adapted for use as in-class or out-of-class assignments; others were individually negotiated with students working toward a specific grade. Teachers in three projects developed their own contracts for students in all or some of the three subject areas.

The instructional programs at the four sites were diverse--each site carried out some of the suggested procedures, but no site had an instructional program that incorporated all of the elements described in the PIP. Teachers in one project handled with seeming ease a combination of teacher-made, individually-negotiated contracts with learning centers, but did not coordinate curriculum among the three subjects. In another project teachers did not coordinate the curriculum around a particular theme as was done in the original program. Rather, they worked separately, each teacher using R-3 materials in an individual way. Games were used frequently, simulations very little. Only the math teacher in this project used contracts as specified. The third R-3 project developed well-organized, individualized reading and math programs, but did not coordinate the curriculum nor integrate games and simulations among the three subjects, and social studies classes at this site spent most of the year doing gaming and simulation with little, if any, individualization. At the fourth project, teachers coordinated the curriculum among subjects, developed their own contracts, and managed to integrate games and simulations into all three subject areas, but did very little with learning centers.

The differences in instructional programs across the four sites may be due partly to the PIP's lack of clear descriptions of procedures to be followed in implementing the various components of the program, and partly to the nature of the program (which requires considerable change on the part of staff). However, in all sites, staff members had, by the end of the year, gained confidence and many of the skills necessary to implement an R-3 instructional program. It appeared that the second year of the projects might bring well-implemented, integrated R-3 instructional programs.

Results of Systematic Observation

Because we cannot observe the original exemplary program itself, and because neither RMC nor SRI know which factors in the original programs caused student achievement gains, we designed the observation procedure to capture those features of the instructional programs that were specified in the PIPs. Narrative descriptions of instructional program implementation for each PIP appear first. Following that, quantitative data from the observation instrument are displayed; PIPs and sites within PIPs are compared on degree of implementation.

As described in Chapter III, a number of scales of PIP implementation were derived from the data gathered on the Observation Instruments during February 1975. These scales measure the implementation of the instructional program for children in terms of (1) Resources and Facilities, (2) Instructional Activities, and (3) Observer Summary judgments.

The Resources and Facilities scales included physical environment, classroom furniture, instructional equipment, and classroom displays. Mean scores and ranks on each of these scales are displayed in Table 10. Average scale values for sites within PIP and for each PIP program, averaged across sites, are presented. Associated with each mean score are standard deviations and rank order values. Sites are rank ordered in terms of mean scale score within PIP. PIP ranks are in terms of mean scale score across PIPs. Since the specificity of PIPs varied, the cross-PIP rankings are not equally meaningful on all scales. This is true for Resources and Facilities, especially with respect to equipment and display scales. For HIT and PTR respectively, the equipment and the display scales were irrelevant since these PIPs had very few pertinent specifications.

Within PIPs, however, the site rankings do present interpretable implementation data. This is particularly true when sites occupy the same relative rank across all scales. For example, the HIT 2 project is consistently better implemented than the HIT 1 project and IRIT 1 is the best implemented IRIT site.

The relative consistency of site implementation rankings can be noted in the average rank scores (Column 1) in Table 10. This value

Table 10

PIP IMPLEMENTATION DATA
RESOURCES AND FACILITIES SCALES

		Variable											
		Physical Environment (space, ventilation, noise, lighting, attractiveness) 1 (Low) to 5 (High)			Classroom Furniture (desks, tables, carrells, shelves, etc) 1 (Low) to 3 (High)			Instructional Equipment (projectors, teaching machine, etc) 1 (High) to 0 (Low)			Classroom Displays (art, pictures, pupil work, etc) 1 (High) to 0 (Low)		
PIP/Sites	Average Rank	Score	SD	Rank[*]	Score	SD	Rank[*]	Score	SD	Rank[*]	Score	SD	Rank[*]
Catch-Up	2.50	4.19	0.45	2	2.33	0.26	4	0.63	0.22	3	0.72	0.23	1
1	2.50	3.93	0.52	4	2.37	0.19	3	0.68	0.26	2	0.86	0.17	1
2	4.00	4.04	0.03	3	2.00	0.20	5	0.48	0.15	5	0.73	0.10	3
3	2.75	5.00	--	1	2.47	--	2	0.67	--	3	0.29	--	5
4[†]	2.25	4.46	0.41	2	2.66	0.28	1	0.56	0.19	4	0.82	0.21	2
5	3.50	3.46	0.16	5	2.29	0.20	4	0.72	0.12	1	0.47	0.09	4
Conquest	3.75	3.81	0.87	6	2.39	0.62	3	0.40	0.32	4	0.64	0.32	2
1	2.00	3.43	1.13	3	2.79	0.27	1	0.11	0.16	3	0.96	0.06	1
2	1.75	3.71	0.81	2	2.31	0.36	2	0.53	0.29	1	0.68	0.21	2
3	2.25	4.12	0.85	1	2.25	0.83	3	0.42	0.31	2	0.44	0.33	3
HIT	3.33	3.91	0.60	5	2.61	0.37	1	--	--	--	0.54	0.36	4
1	2.00	3.83	0.64	2	2.63	0.47	2	--	--	--	0.33	0.25	2
2[†]	1.00	3.98	0.58	1	2.59	0.29	1	--	--	--	0.70	0.37	1
IRIT	2.50	4.01	0.52	3	2.56	0.69	2	0.65	0.27	2	0.61	0.61	3
1[†]	1.00	4.32	0.70	1	2.92	0.30	1	0.70	0.23	1	0.68	0.68	1
2	2.75	3.70	0.27	3	2.70	1.04	3	0.62	0.34	3	0.63	0.42	2
3	2.25	4.00	0.30	2	2.54	0.35	2	0.64	0.25	2	0.52	0.23	3
PTR	3.33	3.99	0.42	4	2.25	0.45	5	0.66[‡]	0.32	1	--	--	--
1	1.67	3.82	0.36	2	2.02	0.47	2	0.71[‡]	0.21	1	--	--	--
2[†]	1.33	4.04	0.43	1	2.32	0.42	1	0.64[‡]	0.11	2	--	--	--
R-3	4.25	4.42	0.62	1	2.08	0.90	6	0.17	0.17	5	0.29	0.22	5
1	2.50	4.74	0.65	1	1.84	1.17	4	0.27	0.19	1	0.26	0.22	4
2	2.50	4.67	0.43	2	2.23	0.84	2	0.10	0.08	4	0.33	0.24	2
3	3.23	3.71	0.38	4	2.01	0.71	3	0.14	0.13	3	0.24	0.21	3
4	1.75	4.40	0.40	3	2.33	0.57	1	0.16	0.21	2	0.36	0.22	1

[*] Site ranks are within PIP, PIP ranks are across PIPs.

[†] Best implemented site (within PIP).

[‡] Material checklist only.

indicates the average within-PIP rank noted for each site across the four Resource and Facilities scales. The best implemented sites for the respective PIPs are: Catch-Up 4, Conquest 2, HIT 2, IRIT 1, PTR 2, and R-3 (4).

The absolute values on the mean scale scores indicate a relatively high degree of implementation across all sites. Average values on the physical environment scale center around 4.0 on a scale whose [redacted] upper Limit is 5.0 This indicates that the sites have provided the space and physical settings suitable for project operations, with R-3 appearing the best implemented on this measure. With regard to furnishings, the sites have again complied with PIP specifications, although all seem to be missing at least some of the articles listed as necessary or desirable. Here the best implemented PIP appears to be HIT.

Regarding instructional equipment, PTR gets high marks, followed very closely by Catch-Up and IRIT. The R-3 PIP is more poorly equipped (score = 0.17 out of 1.00). However, given that R-3 is a program that is more dependent on personal interaction and less dependent on teaching equipment and materials than most others, this result is acceptable from an implementation perspective. The R-3 program does not concentrate heavily on instructional technology and would not necessarily exhibit new gadgets in the classrooms. Among the PIPs that are instruction-intensive (i.e., dependent on the child's engagement with equipment and materials), Conquest had the poorest score on the equipment scale.

The classroom displays scale shows an interesting pattern of scores for the PIPs (excluding PTR, for which the scale is irrelevant). Here Catch-Up is the best implemented PIP, and R-3 the poorest. On this scale, one would expect varieties of displays and materials--enrichments to otherwise conventional classroom settings--to be present in a well implemented project classroom. Apparently R-3 classrooms in these tryout sites were relatively unadorned.

Table 11 presents the site and PIP data on each of the three pupil-focused, instructional activities scales. Data are presented as means, standard deviations, and ranks within PIP for each site, and for each PIP summed across sites.

The activity range scale indicates the average proportion of appropriate instructional activities observed during the 10-minute observation episodes. PTR is clearly the best implemented PIP on this measure. This scale is heavily influenced by the nature of the PIP specifications and the varying appropriateness of the observation methodology to different PIPs. PTR, for example, prescribes a very narrow range of pupil-appropriate instructional activities, and the occurrence of these few pupil activities should be evident within a 10-minute time sample. Other PIPs, such as Conquest, R-3, and Catch-Up, define a much broader range, and it is likely that larger time samples would yield higher scores on this scale for these PIPs.

Scores on the appropriate behaviors (which refers to PIP-relevant pupil behaviors noted during the observation period) show high concurrence with the activity range scores. In most cases, the site and PIP ranks are similar on the two scales. However, whereas the absolute values of activity range scores are only moderate (mostly around 0.50), the behaviors scale scores are relatively high. For the majority of the PIPs, then, the observation procedure was likely to capture only a limited sample of the full range of activities that might occur in the instructional setting. However, those PIP-relevant activities are procedures that were observed to occur (scale 1) in a way essentially consistent with the program described in the PIP (scale 2).

Table 11

PIP IMPLEMENTATION DATA FROM INSTRUCTIONAL ACTIVITIES SCALES--PUPIL VARIABLES

		Scale 1			Scale 2			Scale 3		
		Activity Range (percent relevant) Learning Activities			Appropriate Behaviors (attending, responding, working) Range = 1 (Low) to 3 (High)			Positive Responses (confident, cooperative, satisfied, enthusiastic, attentive) Range = 1 (Low) to 5 (High)		
PIP/Sites	Rank	Score	SD	Rank	Score	SD	Rank	Score	SD	Rank
Catch-Up	3.3	0.53	0.15	3	2.41	0.43	4	4.25	0.74	3
1	3.7	0.55	0.16	3	2.18	0.45	5	4.16	1.06	3
2	3.7	0.42	0.11	5	2.38	0.55	4	4.47	0.35	2
3	2.7	0.61	0.07	2	2.64	0.08	1	3.85	0.30	5
4	2.3	0.63	0.12	1	2.63	0.30	2	4.08	0.36	4
5	2.7	0.51	0.17	4	2.62	0.26	3	4.50	0.37	1
Conquest	5.3	0.26		6	2.34		5	3.92		5
1	1.7	0.24	0.10	2	2.75	0.18	1	3.85	0.43	2
2	1.3	0.33	0.14	1	2.60	0.32	2	4.29	0.80	1
3	3.0	0.22	0.12	3	1.95	0.65	3	3.65	0.88	3
HIT	4.3	0.42	0.20	5	1.86	0.27	6	4.31	0.46	2
1	2.0	0.40	0.15	2	1.72	0.72	2	4.37	0.38	2
2	1.0	0.45	0.25	1	2.07	0.21	1	4.20	0.58	1
IRIT	3.7	0.48	0.48	4	2.51	0.25	3	3.94	0.52	4
1	2.3	0.47	0.13	2	2.43	0.29	3	4.08	0.49	2
2	2.7	0.45	0.10	3	2.52	0.13	2	3.56	0.37	3
3	1.0	0.52	0.11	1	2.60	0.27	1	4.19	0.47	1
PTR	3.0	0.80	0.27	1	2.59	0.26	2	3.55	0.60	6
1	1.0	0.81	0.25	1	2.75	0.11	1	3.77	0.66	1
2	2.0	0.79	0.28	2	2.52	0.28	2	3.48	0.57	2
R-3	1.3	0.55	0.10	2	2.60	0.31	1	4.68	0.67	1
1	1.0	0.63	0.09	1	2.76	0.28	1	4.72	0.57	1
2	2.7	0.53	0.10	3	2.58	0.28	3	4.71	0.75	2
3	3.3	0.47	0.09	4	2.61	0.26	2	4.62	0.94	4
4	3.0	0.54	0.10	2	2.41	0.28	4	4.65	0.69	3

The positive response scale is independent of the particular PIP specifications and measures the socio-emotional response of the pupils to the instructional program, as inferred by the observers. This measure is a factor-pure construct designed into the instrument and validated by means of factor analysis procedures. The results on this scale provide strong evidence that pupils respond very favorably to the PIP instructional programs.

Table 12 presents site and PIP implementation scores on the teacher-focused activity scales. As with the pupil scales, each of these scales reflects the extent of occurrence of PIP-specified instructional activities (scale 1), general behaviors and sequences (scale 2), and overall instructional management and teaching style (scales 3 and 4). Also, whereas scales 1 and 2 are keyed to PIP specifications, scales 3 and 4 are common to all PIPs and refer to general instructor characteristics. Data reported in Table 12 refer to the primary instructional agent. In PTR and HIT this was the tutor, in Conquest this was the clinician, and in Catch-Up, IRIT, and R-3, this was the teacher. Although observation protocols were completed for other instructional agents present in the labs and classrooms (e.g., supervising clinicians, lead teachers, interns, aides), only the primary instructor data are reported here. The mean activity range scores indicate that the best implemented PIP from an instructor perspective is IRIT. This result is interesting since the PIP specifying the fewest and most explicit instructional activities was not IRIT but PTR. Again, however, a general relationship between the activity score and the complexity of the instructional program described in the PIP is inverse and regular, suggesting comparable implementation.

As with pupil-focused scales, the teacher-focused scales on activity range and appropriate behaviors (scales 1 and 2) show reasonable correspondence in terms of mean rankings.

Table 12

PIP IMPLEMENTATION DATA FROM INSTRUCTIONAL ACTIVITIES SCALES--TEACHER/TUTOR VARIABLES

		Instruction						Style					
		Scale 1			Scale 2			Scale 3			Scale 4		
		Activity Range (percent relevant) Instr. Activities			Appropriate Behaviors (progress checks, praise/acknowledgement, questioning) Range = 1 (High) to 3 (Low)			Management Style (controlling, organized, structured) Range = 1 (High) to 5 (Low)			Teaching Style (confident, enthusiastic, pleasant, rewarding, stimulating) Range = 1 (High) to 5 (Low)		
PIP/Sites	Mean Rank	Score	SD	Rank*	Score	SD	Rank	Score	SD	Rank	Score	SD	Rank
Catch-Up	3.50	0.38	0.12	5	1.52	0.71	5.5	4.72	1.13	1.5	4.56	0.95	2
1	1.5	0.42	0.17	1	1.50	0.79	3	4.79	1.16	1	4.87	1.10	1
2	4.0	0.37	0.10	3	1.33	0.78	5	3.94	1.21	4	4.26	0.81	4
3	3.5	0.39	0.06	2	1.49	0.69	4	4.00	1.11	3	3.99	1.14	5
4	2.5	0.35	0.12	5	1.73	0.66	1	4.15	0.95	2	4.41	0.83	2
5	3.5	0.36	0.10	4	1.53	0.57	2	3.80	0.65	5	4.24	0.33	3
Conquest	4.75	0.31		6	1.62		4	4.15		4	4.19		5
1	1.5	0.33	0.12	2	1.91	0.52	1	4.07	0.49	2	4.39	0.45	1
2	1.5	0.38	0.14	1	1.71	0.58	2	4.41	0.54	1	4.30	0.68	2
3	3.0	0.20	0.12	3	1.37	0.66	3	3.94	0.80	3	3.82	0.75	3
HIT (Tutors)	4.62	0.47	0.20	4	1.52	0.50	5.5	3.77	0.67	6	4.27	0.59	3
2	2.0	0.44	0.21	2	1.46	0.51	2	3.83	0.71	2	4.40	0.55	2
3*	1.0	0.50	0.15	1	1.59	0.51	1	3.71	0.58	1	4.02	0.56	1
IRIT	2.25	0.82	0.09	1	2.13	0.32	3	3.96	0.58	5	4.20	0.44	4
1*	1.5	0.82	0.10	2	2.10	0.29	2	4.08	0.72	1	4.33	0.42	1
2	2.0	0.86	0.08	1	2.22	0.18	1	3.82	0.49	3	3.98	0.43	3
3	2.5	0.78	0.09	3	2.05	0.42	3	3.97	0.48	2	4.28	0.39	2
PTR (Tutors)	3.0	0.66	0.08	2	2.85	0.18	1	4.24	0.47	3	4.02	0.55	6
1*	1.0	0.67	0.07	1	2.91	0.11	1	4.22	0.30	1	4.21	0.46	1
2	2.0	0.66	0.09	2	2.82	0.20	2	4.26	0.53	2	3.93	0.57	2
R-3	7.88	0.49	0.09	3	2.23	0.63	2	4.72	0.59	1.5	4.81	0.49	1
1*	1.75	0.52	0.09	1	2.72	0.32	2	4.95	0.18	1	4.74	0.35	3
2	2.25	0.48	0.07	3	2.82	0.60	1	4.83	0.37	3	4.89	0.19	2
3	3.50	0.42	0.07	4	1.76	0.77	4	4.85	0.79	2	4.61	1.02	4
4	2.50	0.51	0.10	2	2.24	0.52	3	4.19	0.68	4	4.95	0.22	1

*Site ranks are within PIP, PIP ranks are across PIPs.

The management style and teaching style scales refer to characteristics of the instructional agents' approach to teaching in the settings observed. The scales were derived from factor analyses performed on observer ratings on a common (across PIP) set of 12 items. These factor analyses were performed separately, PIP by PIP, and in each case yielded the same two-factor structure; this provides validation for the separate trait interpretations. Furthermore, these traits are orthogonal to the pupil response trait, since in no case did pupil scales overlap with teacher scales in the factor solutions (although all scales were entered into analysis simultaneously). The two teacher scales are interpreted as indexes of the overall quality of instructional staff present in the tryout sites. The management style scale indexes how well-organized, structured, and professional the instructor appeared to the observer. The teaching style scale indexes how pleasant, stimulating, enthusiastic, rewarding, and the like, the teacher appeared.

In terms of instructional management characteristics of the teacher, R-3 and Catch-Up sites rated highest, with HIT the lowest. In terms of teaching style, again R-3 and Catch-Up rated highest, with PTR the lowest. When one considers that both Catch-Up and R-3 place a great deal of emphasis on teacher attitudes for appropriate program implementation, whereas HIT and PTR use peer/paraprofessional tutors as the instructional agents, these results are consistent with the belief that the field-test sites were appropriately implemented with regard to instructional staff.

The conclusion based on the data from the observation system is that the PIP instructional environments and activities are well implemented in the field-test projects. This interpretation is supported both in terms of absolute values on the implementation scales (most averaging reasonably near the maximum scale value), and in terms of relative scale positions noted for the PIPs.

Site and PIP results (means, SDs, ranks) on the summary scales are presented in Table 13. The PIP-specified procedures scale represents observer judgments on the fidelity (extent and quality) with which the projects implemented unique PIP features. The usefulness of this scale increases as the number and specificity of the unique features increase.

Table 13 shows that both PTR projects are remarkably well implemented. PTR sites earned an average of 2.92 on this scale. Catch-Up sites also had consistently well implemented projects. Conquest 3 and R-3 (3) projects were the most poorly implemented on this scale.

The remaining two scales (Materials and Activities, and Instructional Management) in this observer summary category were composed of the same items for all PIPs (except PTR). Since they are not sensitive to individual PIP specifications and are useful only for characterizing overall program operations, they will not be covered in our discussion of implementation.

Continuing Project Management Activities

Many activities described for the start-up stage continue to be necessary in operating the project. Some outcomes achieved by the end of start-up are to be refined and improved by continuing training and management activities (project teachers' skills, nonproject classroom teachers' information and attitudes); some new outcomes are expected (achievement gains and improved self-concept in participants). The PIPs prescribe in-service training activities and continued communication with school principals, other administrators, nonproject classroom teachers, parents, and the community. In addition, the PIP concept assumes that during the

Table 13

PIP IMPLEMENTATION DATA FROM OBSERVER SUMMARY SCALES

PIP/Site	PIP-Specified Procedures (instructor roles, pupil behaviors, contracts) Score = 0 (Low) to 3 (High)			Materials & Activities (variety, source, use, pupil involvement) Score = 1 (Low) to 3 (High)		Instructional Management (pupil activities, grouping, interactions, assignment) Score = 1 (Low) to 5 (High)	
	Score	SD	Rank	Score	Rank	Score	Rank
Catch-Up 2.17	2.07 (2)			2.35 (2)		4.05 (3)	L+
1 3.7	2.07		4	2.32	4	4.08	3
2 1.0	2.28	0.46	1	2.50	1	3.60	1
3 3.0	2.21		2	2.33	3	4.20	4
4 2.3	2.12		3	2.35	2	4.02	2
5 5.0	1.91	0.22	5	2.25	5	4.45	5
Conquest 3.17	1.30 (6)			2.36 (1)		4.05 (2)	H+
1 1.7	2.22	0.35	1	2.67	1	3.91	3
2 2.0	1.41	0.65	2	2.19	2	3.98	2
3 2.3	0.72	0.37	3	1.97	3	4.19	1
HIT 3.00	1.69 (4)	0.40		1.30 (4)		4.12 (4)	H+
1 1.7	1.57	0.52	2	1.25	2	4.33	1
2 1.3	1.85	0.19	1	1.36	1	3.85	2
IRIT 3.33	1.74 (3)	0.94		2.33 (3)		3.41 (1)	L+
1 1.0	2.23	1.17	1	2.39	1	2.84	1
2 2.3	1.75	0.72	2	2.32	2	4.12	3
3 2.7	1.25	0.64	3	2.28	3	3.22	2
PTR 1.00	2.92 (1)	0.11					
1 2.0	2.86	0.16	2				
2 1.0	2.94	0.09	1				
R-3 4.6	1.58 (5)	0.76		2.16 (4)		2.99 (5)	H+
1 3.0	1.23	0.70	3	2.03	2	3.36	1
2 1.3	1.96	0.58	2	2.72	1	2.78	4
3 3.0	0.74	0.67	4	1.92	3	2.79	3
4 2.7	2.04	0.32	1	1.79	4	2.91	2

school year, problems will arise and can be handled appropriately if the management philosophy of the project has been internalized by participants.

Toward the end of any school year, preparations are made for the following year. However, since activities preparatory to project reinstatement (garnering financial support, ordering new materials, obtaining future staff commitments) are not specifically included in the PIP concept, they were not the subjects of direct investigation in the first year field test evaluation.

In-Service Training

As presented in the PIPs, staff training is a combination of preservice and in-service training directed toward "preparing staff members to carry out the procedures which have proven successful in the original project." In-service training is for communicating successful techniques for improving instructional skills, management skills, and attitudes, and for solving problems encountered by the PIP staff. After the instructional program has been initiated in general, PIPs specify that in-service meetings are to be conducted regularly, as often as weekly in Conquest and R-3, and as seldom as once a month in PTR. At least one of these meetings is to be led by the project director. The recommended in-service training sessions vary in length and the degree to which they emphasize specific skills training, but the recommendations in all PIPs anticipate more than informal sharing of information between individual teachers on a daily basis.

Although preservice and in-service training are to be conducted at different stages within the project and are to fulfill different functions, they are often intertwined in the specifications written in the PIPs. At most field-test projects, preservice and in-service training were intertwined in practice; most projects had to incorporate some preservice training into their in-service training because of the short start-up period. Nevertheless, in 15 of the 19 projects, in-service training was not adequate when compared with PIP specifications. This evaluation of in-service training is supported by discussions with project directors and teachers, by observation, and by data gathered from project personnel who responded to the ISQ and ASQ. In the case of several projects, no formal in-service meetings were conducted at the sites during the implementation year.

The following summaries by PIP illustrate the nature of in-service training in the field-test projects.

- Catch-Up--Training was ongoing and usually conducted by the lead teacher. Some formal meetings occurred but not on a bimonthly basis. The informality in which in-service was conducted may have been due to the small number of personnel at the Catch-Up sites. The PIP specifies bimonthly in-service but does not specify who conducts the training or staff skills that are necessary. The PIP materials themselves were referred to during start-up but contained little on how to use materials, and therefore publishers became a source of information on curriculum, even during the operations stage.
- Conquest--In two Conquest projects, in-service meetings were held every week as specified. The third project had few in-service meetings, and some of those were inadequate because they were dominated by the topic of integrating other reading programs into the school curriculum. In two of the three sites, the project director rather than the supervising clinician (to whom in-service leadership specifications are directed) conducted in-service training.
- HIT--There was some confusion about preservice and in-service as described in the Project Management Directory and the teacher preparation guide. Although the PIP guidelines did indicate weekly

meetings and a basic format to follow, the frequency of in-service meetings, as well as their format, varied at each site.

- IRIT--No formal in-service was conducted, although the PIP specifies regular meetings with a major emphasis on the preparation of new materials and the modification of commercial materials. Project staff felt that the PIP was of little help regarding specific instructional procedures and techniques to be mastered.
- PTR--In-service sessions were held regularly, although their frequency was different at the two sites. In the larger of the two school districts, in-service sessions were difficult to arrange and were less successful because of the number of tutors involved.
- R-3--In-service training was conducted, but teachers felt that greater depth was needed, especially in the area of curriculum integration. Three of the projects received assistance from within-district consultants, and the original project director was called for advice.

The difficulties of in-service training were attributed partially to the PIPs themselves. Information in the packages was not adequate for either preservice or in-service training purposes. While answers on the questionnaires indicated that the teachers felt that instructional techniques were fairly well described, this did not come through in the interviews.

The PIP concept assumed that project directors, lead teachers, and supervisors would be experienced and knowledgeable people. The description of the exemplary program in the PIP was supposed to be sufficient for the leadership staff to train other project staff, to solve problems that arose during the instructional program, and to help teachers develop appropriate skills and techniques. But even the project leaders in the field-test sites who fulfilled these role expectations completely did not get the adequate, unambiguous information that they expected to find in their PIP.

Related to this problem is a potential dilemma inherent in the PIP concept. On the one hand, it is assumed that a project director will read the PIP information and follow the PIP specifications to the letter. On the other hand, it is assumed that the project director is a creative, independent, and confident leader who does not need to be told what to do. It may be possible to provide just the information that a good leader needs without hampering him, but such balance is not achieved in the training components of the current PIPs. Part of the problem may also be brought on by USOE's request that the sites refrain from relying on technical assistance. In Volume II, the proposed solution for revising PIPs is to describe the desired outcomes thoroughly and then suggest various methods for obtaining the outcomes. Only another test in the field could determine whether this increase in rationale and in "how to" suggestions would be adequate.

Although there was little in the way of formal in-service training conducted according to PIP specifications, the informal meetings and contacts among project staff members was considered very relevant and important by them. IRIT and Catch-Up teachers met informally and talked about problems usually on a daily basis. Despite the frequency of planning sessions and informal meetings for some staff members, most teachers did not feel burdened. By their own report, the in-service training experiences in the classrooms and the frequent informal contacts were most effective in enhancing teachers' skills.

Project staff and nonproject staff who have had some contact with the project agreed on the ISQ that other teachers in their district would benefit from attending PIP training sessions, and that participation in the project has made the PIP staff more effective as teachers and has exposed them to effective instructional techniques and strategies. Project teachers agreed that participation in the project has helped them improve their classroom management skills.

Maintaining Working Relationships with Nonproject Staff

The initial orientations given by the project director during start-up significantly affected the amount of support and cooperation given the projects during the operations stage. The PIP generally specified that the school principals, nonproject classroom teachers, district personnel, and parents be kept informed of all project activities and involved in them whenever possible. IRIT, because of its three cycles, is the only PIP that requires full orientation for nonproject staff during the operations stage, since new schools or new sending teachers can be involved in each cycle.

Principals in most of the sites had good understandings of the PIP goals, management and structure, and instructional techniques during the operations stage of the projects. The information acquired in discussions with principals was supported by responses supplied on the questionnaires. The questionnaires and interview data indicated that other district administrators were also fairly well informed of the projects during operations. Administrators in the district office were kept informed through written reports and informal contact with the project directors. Many district administrators were interested enough in the PIPs to observe instructional periods in the labs. Eighty-six percent of the 36 district administrators in the questionnaire sample stated that they had visited the project labs or classrooms during instruction.

Nonproject teachers were not as well informed of the project activities nor did they generally feel as involved in the projects as they should have. Only 58% of the 240 nonproject teachers who responded on the questionnaire felt that they had a very good or good understanding of the goals of the projects. Approximately 22% had a very good or good understanding of the organization and management structure of the PIP and 42% had a very good or good understanding of the instructional techniques of the project.

Assuming that the understanding and support of regular classroom teachers had been elicited by orientations during start-up, project teachers were supposed to begin cooperating with nonproject staff during student selection and continue their informal and formal contacts regarding student progress and coordination with the regular classroom program throughout the school year. In general, project staffs did not do enough to inform the regular classroom teachers about the nature of the project or the progress of the students.

While principals were well informed about the projects, they were not always appropriately involved. There were some problems in obtaining from the principals the level of cooperation and support described in the PIPs.

In several of the sites where initial orientation of nonproject staff was poorly handled, misunderstanding continued throughout the operations stage. In general though, the project classrooms were exciting and stimulating places to be for both students and staff. The typical problem was that the students' regular classroom teachers did not feel involved in or benefitted by the special project.

Maintaining Parent Participation and Favorable Public Relations

All of the PIPs specify that parent participation as well as favorable public relations should be maintained throughout the school year, but before they can be maintained, they first have to be established. The activities required to establish parent participation and favorable public relations were generally put off until the instructional program was functioning.

Parent Participation

The PIPs specify that once parents have been informed and their participation has been solicited, project staff and school officials should maintain contact throughout the school year. Monthly parent advisory board meetings are specified in Catch-Up, Conquest, and PTR. All PIPs stress the need to keep individual parents informed about the progress of their child or children. Conquest and HIT suggest that parents be kept informed regularly through progress reports sent home with report cards and the like. In Conquest, HIT, and R-3, home visits are recommended two to three times per year. HIT also recommends up to three parent-teacher conferences per school year. The R-3 PIP, which probably emphasizes parent involvement more than other PIPs, also recommends that informal and formal meetings be held periodically with parents. IRIT requires permission slips to be sent home before each cycle and suggests that participating children's parents be invited to a dinner and graduation ceremony following each of the three cycles.

Parents are encouraged to visit the PIP centers in Catch-Up, IRIT, and R-3, and are encouraged to participate in PIP classroom activities in both Catch-Up and R-3. The R-3 PIP even suggests inviting parents to inspect the site of the intensive involvement study trip before the R-3 students participate in it themselves.

Time constraints were lessened, once instructional program operations were under way. Project personnel acknowledged the emphasis that PIPs placed on soliciting parent participation, but both project directors and principals were pessimistic about the solicitation of parent participation. Not only is the involvement of parents very difficult in terms of logistics and attitudes, especially in economically deprived areas, but active parent participation also presents burdens to educators who are striving to conduct a program according to their best professional judgments (and the PIPs advice) about what is best for the students.

Nevertheless, each of the projects reported that attempts were made to solicit parent participation. In most of the projects for which the PIP specified a parent advisory board, such a group existed, although it is doubtful that any had an influential role in the projects. Since guidelines for Title I support require parent advisory boards, however, projects that have such groups are thereby more eligible for future support.

A number of questions in both the ASQ and ISQ were designed to elicit the amount and kind of interaction between parents and school officials and teachers. When asked if they had talked about the project to parents of students who were participating in the project, 72% of 142 administrative staff respondents said that they had. Of 184 project teachers who responded, 82% said that they had talked about the project with participants' parents, and 45% of 240 nonproject teachers said they had. In informal telephone interviews conducted with 61 parents across 14 projects by SRI evaluation staff near the end of the school year, it was found that 84% of those parents contacted knew that their child was participating in a PIP program.

When asked which aspects of the project were discussed with parents, the administrative staff reported that the most common aspects were objectives of the project, followed by the instructional techniques and materials used in the project. Project teachers reported that progress of the individual child was of most interest to parents, followed by objectives of the program, materials used, and instructional techniques. Nonproject teachers reported that parents were most interested in the special needs of their children, followed closely by their rate of progress, objectives of the program, and the way in which their children were selected to participate in the program.

In general, the R-3 projects appear to have exerted the most effort and were the most successful in maintaining parent participation. R-3 (4) sponsored a magic show for which the price of admission was "one parent." R-3 (4) also reported that a pre-intensive involvement dinner was held in mid-year in all R-3 projects, either to demonstrate R-3 materials and equipment or to advise parents of plans for the intensive involvement study trip. Parent participation appears to have been adequate in the IRIT projects although IRIT project 2 reported only a few parents attended the open house held during the third cycle.

Maintaining Favorable Public Relations

Although maintaining parent participation is specified in all the PIPs, maintaining favorable public relations is merely implied. Most projects seem to have obtained favorable public relations and maintained them throughout the school year, although only three projects made a concerted effort to keep the community informed of the programs.

Several projects informed the public about their programs before school started, and almost all had local media coverage at some time during the year. For example, the local newspaper published articles about R-3 (3), and a project overview was presented on a local TV program. One school district came up with a unique idea by providing a telephone tape-recorded message about the R-3 and IRIT programs in that community, and advertising the telephone number in the local newspaper. The project director in HIT 2 spent a great deal of time creating public relations materials. Presentations were also made to public interest groups (e.g., Rotary Club). Conquest 1 periodically published articles in the paper and made presentations to community interest groups. As might be expected, projects in the smaller communities relied also on informal, word-of-mouth approaches.

More than half of the project directors and more than hald of the district administrators (61% respectively) responding to the ASQ stated that they used the news media to inform the community about the project. Results of both the ASQ and ISQ show that press releases were the most common media used in informing the community about projects, followed by the distribution of descriptive folders and other types of news coverage. According to results of the site visit interviews, four projects got radio or TV coverage. In the case of PTR 2, the project was described as one part of the large district-wide tutoring program.

In general, public and parental attitudes toward the programs were favorable, even in those communities where project and school officials did little to elicit and maintain them.

Summary of the Operations Stage

Almost immediately after the school year began in the field-test sites, the instructional programs in all 19 projects were in full operation, although project teachers and aides were not confident about what they were doing. In February, the instructional programs looked almost exactly like those described in the PIPs, and the project teachers and aides, having nearly forgotten the origins of the project in the PIP, were proud and confident participants in their own projects. Data from the systematic observation procedure indicated in detail the high degree of implementation at most sites. The RMC specialists, who had seen the original exemplary programs and described their features in the PIPs, were impressed with the replication of the specified features.

For PTR 1, appropriate implementation of the instructional program had been delayed until January when the necessary curriculum materials arrived, but the PTR 2 program was fully implemented early in the year and confidence was high. The PTR projects were judged by RMC to be replications of the exemplary programs. IRIT, Catch-Up, and two of the three Conquest projects had well-implemented laboratory classrooms. There was considerable individual activity, and the instructional techniques were as varied as expected. Since the PIPs do not specify the instructional sequencing any further than saying that diagnostic-prescriptive techniques should be used and the curriculum should be individualized, and since Catch-Up and IRIT especially emphasize creativity on the part of the instructional staff, the measurement of replication of the instructional program beyond these levels is not appropriate. In the R-3 program, the specified activities (use of contracts, gaming/simulation techniques) were present, but in three of the four sites, teachers were still not confident about their use of those techniques or the integration of the subjects into a unified curriculum. In the HIT program where the materials should guide the sequence of instruction, although most of the features of center operation were well implemented, RMC personnel realized that rhythmic patterns of the instructional sequencing had not been communicated in the PIPs or by the curriculum materials. Whether those rhythmic aspects of presenting the skill lesson are essential to the effectiveness of the HIT program is, of course, unknown.

In-service training, communications with nonproject teachers, and other management functions expected during the operations stage were not well handled in light of the PIP specifications. This discrepancy hardly concerned the project participants, and for the most part, did not have serious impacts. The project staff handled instructional problems informally and grew in confidence. School principals and other district administrators were fairly well informed and favorably disposed. The exception was that nonproject teaching staff were inadequately involved, and in some cases felt left out. This may have had some negative impact on some of the students participating in the projects.

PIP Project Outcomes

The implementation of all aspects of the projects in the operations stage is of the greatest concern because the PIP concept assumes that if the original exemplary program is replicated, the original outcomes will result again in the new site. The PIP concept is clear that student outcomes are the focus; exemplary programs were chosen primarily on the basis of their effectiveness in terms of student achievement.

The achievement gains obtained in the original sites were not measured during their start-up period. And it would not be quite appropriate to assess the new projects on the basis of student outcomes during the year when the LEAs were trying to install them and implement the effective instructional strategies.

Nevertheless, we measured achievement outcomes on a sample of project students. This was done in case a second year of the field test and its evaluation was not possible; some indication of results likely to be obtained after implementation might be visible. Also, the methodology of assessment could be worked out so that a second year analysis, if funded, would be feasible and clear. In addition to achievement effects, we assessed the impact of PIP project implementation on student attitudes to ensure that the projects were not harmful in terms of student self-concept and attitudes toward school. Other impacts of interest were effects on the school staffs attempting to implement the projects via PIPs and the general attitude toward the projects on the part of parents and community.

Student Achievement Outcomes

The main issue to be resolved eventually by student achievement outcome data is: Did the PIP projects pass the criterion of one-third standard deviation growth above expected, where expected normal growth is defined as that amount of growth required to maintain, in the spring, the percentile of the fall standard score? Related to this is the question: How close are the results in the PIP field-test projects to the results of the original programs?

Achieving Criterion Growth

Table 14 shows the number of standard score points on the MAT that must be added to the expected standard score to get the criterion growth at each grade. Although it was not made clear in the analysis methodology section (Chapter III), it should be pointed out that we are not dealing with a single criterion of effectiveness. The criterion is different across grades, and as mentioned in Chapter III, across different tests. We discuss first the norm referenced analyses which are based on MAT Standard Score achievement data pooled over all projects for each PIP. There were spring data on over 95% of the PIP participants tested in the

Table 14

ONE-THIRD STANDARD DEVIATION OF THE MAT
NORM STANDARD SCORES

Grade	Word Knowledge	Reading	Math Computation	Math Concepts	Math Problem Solving	Total Reading	Total Math
2	3*	4				3*	4
3	3*	4				4	4
4	4	4*	3*	4	4	4*	4
5	4	5	3	4	4	4*	3
6	4*	5	4	4	4*	4*	4
7	4*	5	4	4	4*	5	4

Note: All values in this table are derived from the same tables as the Spring Expected Scores.

*Harcourt, Brace, Jovanovich also published tables of standard deviations. The starred numbers on this table are lower than the published numbers because of differences in rounding.

fall. Table 15 shows the results of the norm referenced analyses for all PIPs, except PTR, where norm referenced analysis was not done.

According to the norm referenced analyses, the PIP projects do not generally achieve criterion growth. Table 15 shows that in the 16 cases where data were sufficient to make the decision at the 95% confidence level, no PIP achieved the criterion for Total Reading or Total Math. For Total Reading, in only two cases out of 13 were the data insufficient to declare the results one way or the other. For Total Math, data were insufficient in three out of the eight cases.

For the Math Computation subtest, Catch-Up at grade five and HIT at grade seven are judged successful. However, considering that there are 44 opportunities for passing the criterion at subtest levels, finding only two successes is not encouraging overall. Of the remaining 42 cases at the subtest level, for ten cases, or 24%, data are insufficient to declare the results one way or the other.

The scatter plots for the regression discontinuity analysis are shown for both PTR sites in Figures 15 and 16. In PTR 1, the regression line fitted to the PTR students' pretest and posttest scores crosses the regression line of the non-PTR students near the pretest cutoff score for both MAT subtests.

According to the regression discontinuity model, if the PTR project were effective, the solid line would be above the dotted line, since the dotted line, based on the non-PTR comparison group, is the estimate of PTR student performance without the program. When we combine this unexpected picture with the fact that quite a few students in this site were able to get only a few items correct on the pretest, the regression discontinuity analysis does not permit a sensible interpretation of the results.

For PTR 2, the regression lines are also very close together at the cutoff score. Tables 16 and 17 show the statistical tests of differences between the PTR and non-PTR groups at the cutoff score. For both projects, this analysis is unequivocally negative.

The regression projection analysis, also described by Horst, Tallmadge, and Wood (1975), suggests that treatment effects can be represented as the distance between the two regression lines below the cutoff score. PTR results are difficult to interpret according to this model. The treatment group line for PTR 1 lies below the comparison group regression line for most of its length. It is possible that PTR 2 results as shown in Figures 15 and 16 could be interpreted to mean that the treatment is more effective for children who score lowest on the pretest, but other interpretations are also possible. When the special regression models (regression discontinuity and regression projection) were chosen for the PTR analysis, the specific theoretical expectations for treatment effects, which the mathematics in the models was supposed to represent, were not well worked out. Nevertheless, from the results for PTR as from the results for the other PIPs, we conclude that the general expectations for effectiveness in terms of the achievement criteria were not met in this first year field test.

The PTR 2 data support one further analysis, since staff in the PTR 2 site assigned children scoring below 70 on the Murphy-Durrell to either the PTR treatment group or to a control group at random. Table 18 shows the F tests for comparing treatment and control groups on the Murphy-Durrell and the two MAT Primer subtests. It can be seen that there are no significant differences between the groups on either the pretest or the posttest. The most notable fact is that the comparison children's average was somewhat higher on their pretest. However, this does not contradict random assignment of cases, since inspection of the data sorted by prescore shows the control and experimental children to

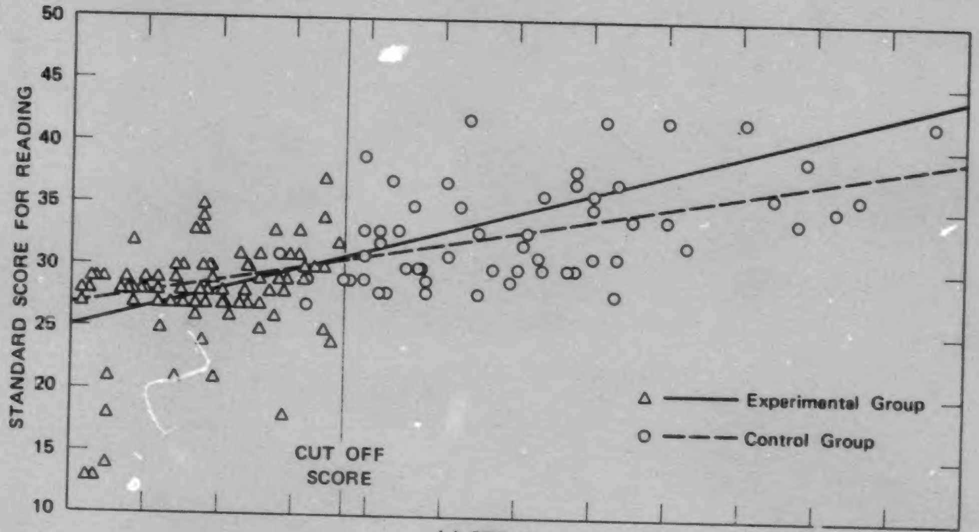
	Word Knowledge (1)					Reading (2)					M	
	Gain Over Fall	Gain Over Expected Gain	t Test	Meets Criterion Growth	Meets Normal Growth	Gain Over Fall	Gain Over Expected Gain	t Test	Meets Criterion Growth	Meets Normal Growth	Gain Over Fall	Gai Ove Expec Gai
CATCH-UP												
Grade 2 4 sites No. pupils	9.20	-1.98	-2.19 44	No	No	7.91	0.61	0.72 44	No	Unknown		
Grade 3 2 sites No. pupils	4.81	-0.13	-0.06 18	Unknown	Unknown	3.25	2.47	2.08 18	Unknown	Unknown		
Grade 4 5 sites No. pupils	2.77	-1.55	-2.06 69	No	No	3.28	-1.32	-1.29 69	No	Unknown	5.49	-1.8
Grade 5 3 sites No. pupils	5.93	0.58	0.85 19	No	Unknown	6.27	-0.58	-0.61 19	No	Unknown	12.60	7.08
Grade 6 4 sites No. Pupils	4.71	1.55	2.91 37	No	Yes	3.20	-2.05	-2.31 37	No	No	6.42	-0.25
CONQUEST												
Grade 2 3 sites No. pupils	11.38	-0.30	-0.31 78	No	Unknown	9.11	0.24	0.26 80	No	Unknown		
Grade 4 3 sites No. pupils	4.30	-1.48	-1.91 84	No	Unknown	4.99	-0.17	-0.17 85	No	Unknown		
Grade 6 3 sites No. pupils	3.27	-0.02	-0.04 88	No	Unknown	4.86	-1.33	-1.62 88	No	Unknown		
HIT												
Grade 6 1 site No. pupils	3.00	-0.52	-0.68 23	No	Unknown	3.35	-5.04	-3.51 23	No	No	4.57	-0.57
Grade 7 1 site No. pupils	3.81	2.98	5.03 52	Unknown	Yes	2.53	0.19	0.22 52	No	Unknown	7.73	7.71
IRIT												
Grade 3 3 sites No. pupils	2.52	-2.89	-3.01 63	No	No	4.49	2.39	2.82 63	Unknown	Yes		
Grade 4 3 sites No. pupils	5.13	-0.35	-0.54 49	No	Unknown	2.50	-2.23	-2.55 49	No	No		
R-3												
Grade 7 4 sites	2.96	2.32	5.43 190	No	Yes	3.73	1.92	2.97 190	No	Yes	2.52	0.12

Table 15

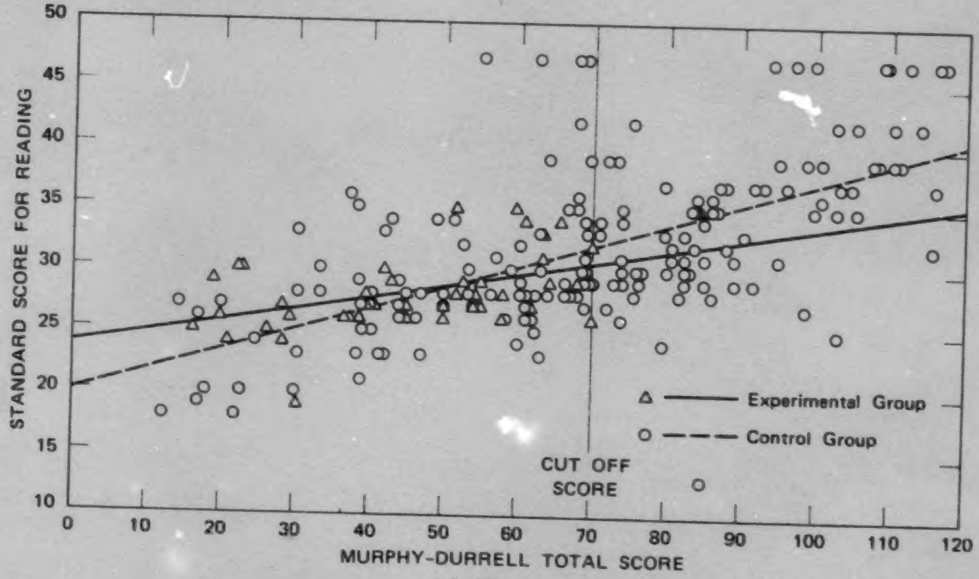
RESULTS OF THE NORM REFERENCED ANALYSIS OF MAT DATA BY GRADE

	Math Computation (3)					Math Concepts (4)					Math Problem Solving (5)				
eets ormal rowth	Gain Over Fall	Gain Over Expected Gain	t Test	Meets Criterion Growth	Meets Normal Growth	Gain Over Fall	Gain Over Expected Gain	t Test	Meets Criterion Growth	Meets Normal Growth	Gain Over Fall	Gain Over Expected Gain	t Test	Meets Criterion Growth	Meets Normal Growth
known															
known															
known	5.49	-1.81	-1.55 73	No	Unknown	4.63	-1.12	-1.11 73	No	Unknown	2.29	-4.65	-3.51 73	No	No
known	12.60	7.08	5.46 23	Yes	Yes	4.78	1.92	1.50 22	Unknown	Unknown	8.28	4.28	1.92 22	Unknown	Unknown
o	6.42	-0.25	-0.21 27	No	Unknown	4.21	0.19	0.18 27	No	Unknown	3.35	-1.69	0.89 27	No	Unknown
known															
known															
known															
o	4.57	-0.57	-0.41 23	No	Unknown	5.65	3.30	2.56 23	Unknown	Yes	4.74	-1.96	-1.30 23	No	Unknown
known	7.73	7.71	7.39 51	Yes	Yes	4.61	4.33	5.47 51	Unknown	Yes	4.78	2.39	2.30 51	Unknown	Yes
es															
o															
es	2.52	0.12	0.17 190	No	Unknown	4.11	3.70	6.49 182	Unknown	Yes	3.87	1.19	1.70 182	No	Unknow

	Math Problem Solving (5)					Total Reading (6)					Total Math (7)				
l h	Gain Over Fall	Gain Over Expected Gain	t Test	Meets Criterion Growth	Meets Normal Growth	Gain Over Fall	Gain Over Expected Gain	t Test	Meets Criterion Growth	Meets Normal Growth	Gain Over Fall	Gain Over Expected Gain	t Test	Gain Over Criterion Gain	Meets Normal Growth
						7.57	-2.0	-3.61 44	No	No	14.73	-0.34	-0.24 44	No	Unknown
						4.36	1.58	1.56 18	No	Unknown	7.57	0.41	0.18 17	Unknown	Unknown
wn	2.29	-4.65	-3.51 73	No	No	2.96	-2.83	-3.89 69	No	No	5.19	-2.87	-3.04 72	No	No
wn	8.28	4.28	1.92 22	Unknown	Unknown	6.67	1.47	7.82 19	No	Yes	9.06	3.60	3.82 22	Unknown	Yes
wn	3.35	-1.69	0.89 27	No	Unknown	4.04	-0.61	-1.16 37	No	Unknown	5.23	2.16	2.99 27	No	Yes
						9.79	0.12	0.17 78	No	Unknown					
						4.41	-1.30	-2.16 83	No	No					
						4.19	-0.98	-1.78 88	No	Unknown					
	4.74	-1.96	-1.30 23	No	Unknown	3.35	-1.74	-2.00 23	No	Unknown	4.96	-0.26	-0.30 23	No	Unknown
	4.78	2.39	2.30 51	Unknown	Yes	3.26	2.65	6.00 52	No	Yes	5.39	2.86	4.56 51	Unknown	Yes
						4.82	1.75	2.58 63	Unknown	Yes					
						4.09	-1.45	-2.89 49	No	No					
	3.87	1.19	1.70 182	No	Unknown	3.62	3.36	7.47 190	Unknown	Yes	3.75	2.95	6.61 182	No	Yes

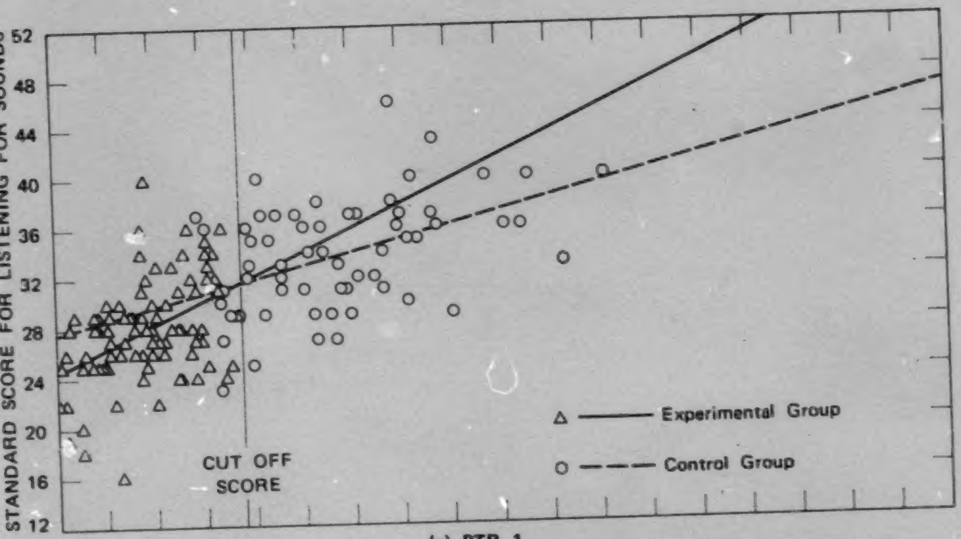


(a) PTR 1

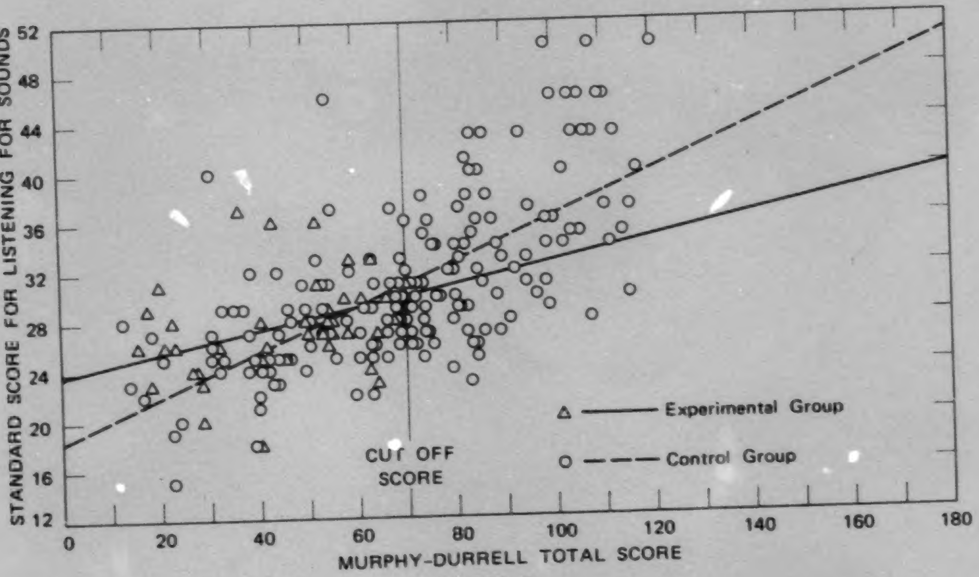


(b) PTR 2

FIGURE 15 SCATTER PLOT FOR REGRESSION DISCONTINUITY ANALYSIS FOR TOTAL READING



(a) PTR 1



(b) PTR 2

FIGURE 16 SCATTER PLOT FOR REGRESSION DISCONTINUITY ANALYSIS FOR TOTAL LISTENING FOR SOUNDS

Table 16

REGRESSION DISCONTINUITY ANALYSIS FOR PTR: READING

	Variables	Mean	Standard Deviation	Correlation Coefficient	Regression Coefficient	t Test for Coefficient = 0	Intercept
PTR 1							
Experimental Group N = 85	Murphy-Durrell (I.V.) Reading (D.V.)	17.71 27.86	9.49 4.24	0.35	0.16	3.44	25.06
Control Group N = 61	Murphy-Durrell (I.V.) Reading (D.V.)	59.38 33.03	19.93 4.08	0.52	0.11	4.62	26.77
	df = 142 $SE_p = 1.20$ $\hat{y}_t - \hat{y}_c = 0.23$ t = 0.19						
PTR 2							
Experimental Group N = 42	Murphy-Durrell (I.V.) Reading (D.V.)	45.40 28.05	15.90 3.16	0.48	0.10	3.48	23.70
Control Group N = 177	Murphy-Durrell (I.V.) Reading (D.V.)	70.43 31.93	24.41 6.63	0.63	0.17	10.81	19.83
	df = 215 $SE_p = 1.42$ $\hat{y}_t - \hat{y}_c = -1.46$						

NOTE: I.V. = Independent Variable
D.V. = Dependent Variable.

Table 17

REGRESSION DISCONTINUITY ANALYSIS FOR PTR: LISTENING FOR SOUNDS

	Variables	Mean	Standard Deviation	Correlation Coefficient	Regression Coefficient	t Test for Coefficient = 0	Intercept
PTR 1							
Experimental Group N = 85	Murphy-Durrell (I.V.)	17.71	9.49	0.43	0.19	4.36	24.57
	Listening for Sounds (D.V.)	27.93	4.18				
Control Group N = 61	Murphy-Durrell (I.V.)	59.38	19.93	0.46	0.11	3.93	27.70
	Listening for Sounds (D.V.)	33.98	4.63				
	df = 142 $SE_p = 1.24$ $\hat{y}_t - \hat{t}_c = -0.02$ $t = -0.17$						
PTR 2							
Experimental Group N = 42	Murphy-Durrell (I.V.)	45.40	15.90	0.36	0.09	2.42	23.89
	Listening for Sounds (D.V.)	27.86	3.89				
Control Group N = 177	Murphy-Durrell (I.V.)	70.43	24.41	0.65	0.18	11.38	18.36
	Listening for Sounds (D.V.)	30.89	6.66				
	df = 215 $SE_p = 2.35$ $\hat{y}_t - \hat{y}_c = -0.81$ $t = -0.34$						

NOTE: I.V. = Independent Variable
D.V. = Dependent Variable.

Table 18

PTR 2--F TESTS FOR TREATMENT VERSUS COMPARISON FOR CHILDREN SCORING BELOW 70 ON THE MURPHY-DURRELL

	Fall Murphy-Durrell Total Score	Spring MAT Primer Listening for Sounds	Spring MAT Primer Reading
Treatment			
Mean	45.41	27.86	28.05
Standard Deviation	15.90	3.89	3.16
N	42	42	42
Comparison			
Mean	50.36	27.51	29.15
Standard Deviation	15.73	4.73	6.07
N	86	86	86
BMS	693.02	3.37	34.37
WMS	249.16	20.04	28.10
D.F.	1	1	1
	126	126	126
F Ratio	2.78	0.17	1.22
Combined			
Mean	48.73	27.63	28.79
Standard Deviation	15.90	4.46	5.31
N	128	128	128

Correlations

		MAT Listening for Sounds	MAT Reading
Treatment	Murphy-Durrell	0.36	0.48
Comparison	Murphy-Durrell	0.44	0.51

be fairly well mixed. The low correlations between the pretest and posttest results indicate that the analysis of covariance is not required.

While these results show a generally negative outcome from the point of view of the norm referenced model, it does not follow that particular projects are not meeting the criterion. This is because the process of pooling the data across sites with the same PIP may mask the good performance of an atypical project.

The question of project differences within PIPs was investigated for all PIPs except PTR, by calculating one-way analyses of variance with projects as the classification variable and the achievement standard scores as the dependent variables. Results of this investigation can be seen in Tables 19 through 23. These tables also show the usual descriptive statistics for the fall and spring data, as well as the approximate t-test for achievement of equal percentile growth. For these tables, it can be seen that there is considerable heterogeneity of projects within PIPs, as judged by the analyses of variance.

The tables also indicate that the fall-spring correlations for Grade 3, where Primary I and Primary II were given in the fall and spring, respectively, are not extremely low in relation to the other grades. This result does not suggest that there is a marked discontinuity between these tests, at least relative to the other members of the MAT test battery. For this reason, no adjustment for such an effect was made, although from the study by Barker and Pelavin, mentioned in Chapter III, one could conclude that this adjustment would be legitimate in some circumstances. Overall, the fall-spring correlations are quite good, with some exceptions. These are clustered at grade four for Catch-Up, where all the mathematics subtests show rather low values. Since at this grade, the Primary II was given in the fall and the elementary was given in the spring, this is another grade in which a discontinuity in the standard scores may influence the data. Further investigation may resolve such problems. In this study, the issues are clouded by possible treatment effects, and so they cannot be explicitly addressed here.

It is of interest that generally the F tests for differences among sites on Total Reading and Total Math standard scores decrease from fall to spring. This means that relative to the variance among children within projects, the variance between projects drops over the school year. Such a result is consistent with what one would expect as implementation of the PIPs smoothed away some of the differences between sites.

Tables 24 and 25 show whether this implementation resulted in the achievement of criterion growth at the level of individual projects. It can be seen that while, as the F test indicated, there is heterogeneity among the sites, the picture that appeared when projects were pooled within PIPs is not different when individual projects are examined. The principal difference is that when individual projects are considered, there are not enough pupils per project to decide at the 95% confidence level whether or not equal percentile growth is maintained.

For Total Math, one project, Catch-Up 4 at fourth grade, achieved the criterion at the 95% confidence level. No projects achieved it for Total Reading. HIT 2 at seventh grade achieved criterion growth in the Math Computation subtest at the 95%* confidence level. This, then, is as much as the norm referenced approach can reveal.

Achieving "Expected Growth

As shown in Tables 24 and 25, at the second grade the confidence interval approach indicates that Catch-Up is not maintaining equal percentile growth for Total Reading. At grade four, the average over projects for this PIP does not show equal percentile growth in either Total Reading or Total Math. At this same grade, Conquest and IRIT are also behind. Generally, if at least normal growth is maintained or Total Reading, it is also maintained on the Word Knowledge subtest. If at least normal progress is made on Total Math, then the same is true for either the MAT Computation or Math Concepts subtest. Only in HIT grade 7 is at least equal percentile growth maintained for both Math Concepts and Math Computation. In this case, Math Problem Solving also shows at least normal growth.

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* Actually less than 95% confidence from the point of view of the experimentwise confidence levels. However, the problem of assigning the correct probability is too complex to be discussed here.

It would not be correct to conclude that the results indicate that PIP projects are harmful. For all PIPs, except Conquest where data are too few to decide, there is evidence at the 95% confidence level that on some subtests, the children are making at least average growth. In addition, it is not at all clear what normal or "expected" growth would be for the children participating in the PIP projects. This is discussed in a later subsection entitled Some Properties of the Equal Percentile Growth Criterion.

Comparison with Dissemination and Review Panel Criteria

The negative results presented do not show that the PIP field-test projects have failed the criterion that the originating projects passed. One reason for this, which has been mentioned before, is that the criterion used on the original sites, of necessity, changed from test to test and from grade to grade. That is, the "one third standard deviation" does not represent a single criterion; there are multiple criteria.

However, while the PIP projects have failed the general criterion set at the beginning of this evaluation, it has not necessarily been demonstrated that they failed the criterion of replicating the exemplary programs' effectiveness, since the two evaluation designs were not identical.

Tabl

DESCRIPTIVE STATISTICS

(Numbers in Parentheses Are the Number of Children

CATCH-UP		Word Knowledge (1)				Reading (2)				Math Computation (3)			
		Fall	Exp	Spring	t	Fall	Exp	Spring	t	Fall	Exp	Spring	t
Grade 2	Mean	37.83	49.0	47.02	-2.19	34.70	42.0	42.61	0.72				
4 sites	S. Dev	7.13		8.48		[illegible].34		6.47					
MAT Primary I, Fall	N	46	(44)	46		46	(44)	46					
MAT Primary II, Spring	BMS*	169.29		126.99		7.83		34.09					
	WMS†	42.40		68.05		42.48		42.40					
	F. Ratio	3.99‡		1.87		0.18		0.80					
F-S Correlations				0.67				0.57					
Grade 3	Mean	51.56	56.5	56.37	-0.06	48.22	49.0	51.47	2.08				
2 sites	S. Dev	10.53		10.41		7.06		7.29					
MAT Primary I, Fall	N	18	(18)	19		18	(18)	19					
MAT Primary II, Spring	BMS*	910.22		793.70		430.22		247.84					
	WMS†	60.89		68.16		26.06		41.70					
	F. Ratio	14.95‡		11.64‡		16.51‡		5.94‡					
F-S Correlations				0.62				0.72					
Grade 4	Mean	54.69	59.0	57.45	-2.06	49.40	54.0	52.68	-1.29	54.70	62.0	60.19	-1.5
5 sites	S. Dev	7.69		9.25		8.87		9.85		10.26		11.57	
MAT Primary II, Fall	N	70	(69)	71		70	(69)	71		74	(73)	74	
MAT Elementary, Spring	BMS*	202.14		240.51		322.67		166.12		581.32		971.42	
	WMS†	48.90		76.11		63.73		92.80		77.63		85.42	
	F. Ratio	4.13‡		3.16‡		5.06‡		1.79		7.49‡		11.37‡	
F-S Correlations				0.72				0.57				0.57	
Grade 5	Mean	59.65	65.0	65.58	0.85	56.15	63.0	62.42	-0.61	61.48	67.0	74.08	5.46
3 sites	S. Dev	9.81		10.67		14.21		12.89		8.70		12.02	
MAT Elementary, Fall	N	20	(19)	19		20	(19)	19		23	(23)	25	
MAT Elementary, Spring	BMS*	316.56		320.65		293.38		226.97		128.35		169.52	
	WMS†	70.32		88.08		191.28		158.67		70.45		142.13	
	F. Ratio	4.50‡		3.64‡		1.53		1.43		1.82		1.19	
F-S Correlations				0.94				0.93				0.81	
Grade 6	Mean	63.85	67.0	68.55	2.91	62.74	68.0	65.95	-2.31	70.33	77.0	76.75	-0.21
4 sites	S. Dev	10.04		11.64		12.06		12.93		12.05		11.20	
MAT Elementary, Fall	N	39	(37)	38		39	(37)	38		27	[illegible]	32	
MAT Elementary, Spring	BMS*	334.39		608.70		476.11		573.43		718.45		563.75	
	WMS†	80.68		93.69		117.06		131.28		70.38		78.53	
	F. Ratio	4.14‡		6.50‡		4.07‡		4.37‡		10.21‡		7.18‡	
F-S Correlations				0.93				0.87				0.78	

* BMS = Between Mean Square.

† WMS = Within Mean Square.

‡ $p < 0.05$.

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Table 19

CRIPTIVE STATISTICS FOR CATCH-UP BY GRADE
Number of Children for Whom Both Fall and Spring Data Are Available)

Computation (3)			Math Concepts (4)				Problem Solving (5)				Total Reading (6)				Total Math (7)			
Exp	Spring	t	Fall	Exp	Spring	t	Fall	Exp	Spring	t	Fall	Exp	Spring	t	Fall	Exp	Spring	t
											35.93	45.5	43.50	-3.61	33.93	49.0	48.66	-0.24
											5.60		6.08		7.96		10.70	
											46	(44)	46		45	(44)	47	
											54.14		47.32		573.61		75.17	
											29.68		36.18		26.00		117.23	
											1.82		1.31		22.06‡		0.64	
													0.76				0.46	
											48.22	51.0	52.58	1.56	50.84	58.0	58.41	0.18
											7.89		7.26		12.87		10.63	
											18	(18)	19		19	(17)	17	
											533.56		341.34		583.63		216.86	
											32.85		35.72		141.11		106.08	
											16.24‡		9.56‡		4.14		2.04	
													0.82				0.64	
62.0	60.19	-1.55	55.25	61.0	59.88	-1.11	55.05	62.0	57.35	-3.51	51.21	57.0	54.17	-3.89	56.95	65.0	62.14	-3.04
	11.57		8.30		10.32		9.28		12.77		7.71		9.06		8.03		10.92	
(73)	74		73	(73)	75		73	(73)	75		70	(69)	71		73	(72)	74	
	971.42		363.55		513.56		324.86		1,058.27		209.00		174.71		332.49		884.42	
	85.42		51.61		83.25		72.12		111.83		50.27		76.44		48.73		75.00	
	11.37‡		7.04‡		6.17‡		4.50‡		9.46‡		4.16‡		2.29		6.82‡		11.79‡	
	0.57				0.57				0.49				0.73				0.66	
67.0	74.08	5.46	64.14	67.0	68.92	1.50	61.00	65.0	69.28	1.92	56.80	62.0	63.47	7.82	65.55	71.0	74.60	3.82
	12.02		9.90		15.08		11.93		15.42		12.51		11.40		9.96		14.00	
(23)	25		22	(22)	25		22	(22)	25		20	(19)	19		22	(22)	25	
	169.52		251.74		416.85		155.68		606.45		342.29		301.91		152.22		374.73	
	142.13		81.74		210.28		140.98		204.19		134.51		108.43		93.63		179.84	
	1.19		3.08		1.98		1.10		2.97		2.54		2.78		1.63		2.08	
	0.81				0.88				0.66				0.97				0.90	
77.0	76.75	-0.21	67.48	71.5	71.69	0.18	66.96	72.0	70.31	-0.89	62.36	67.0	66.39	-1.16	71.93	75.0	77.16	2.99
	11.20		13.31		12.59		12.87		16.95		10.62		12.48		12.82		13.30	
(27)	32		27	(27)	32		27	(27)	32		39	(37)	38		27	(27)	32	
	563.75		911.18		977.01		479.86		1,484.28		412.20		648.91		744.68		1,036.28	
	78.53		81.36		70.85		124.76		159.07		87.04		112.19		88.69		84.84	
	7.18‡		11.20‡		13.79‡		3.85‡		9.33‡		4.74‡		5.78‡		8.40‡		12.22‡	
	0.78				0.84				0.71				0.94				0.88	

Table 20

DESCRIPTIVE STATISTICS FOR CONQUEST BY GRADE
(Numbers in Parentheses Are the Numbers of Children for Whom Both Fall and Spring Data Are Available)

Conquest		Word Knowledge (1)				Reading (2)				Total Reading (6)			
		Fall	Exp	Spring	t	Fall	Exp	Spring	t	Fall	Exp	Spring	t
Grade 2	Mean	37.32	49.0	48.70	-0.31	36.12	45.0	45.23	0.26	35.83	45.5	45.62	0.17
3 Sites	S. Dev	10.62		10.95		7.51		9.51		7.66		9.17	
MAT Primary I--Fall	N	81	(78)	81		83	(80)	81		81	(78)	81	
MAT Primary I--Spring	BMS†	872.14		525.38		245.03		523.61		455.41		453.97	
	WMS‡	93.38		109.59		51.71		79.30		48.57		74.68	
	F Ratio	9.34*		4.79*		4.74*		6.60*		9.38*		6.08*	
F-S Correlations				0.65				0.56				0.72	
Grade 4	Mean	53.22	59.0	57.52	-1.91	50.84	56.0	55.83	-0.17	51.29	57.0	55.70	-2.16
3 Sites	S. Dev	6.02		9.44		8.[illegible]		11.13		6.72		9.14	
MAT Primary II--Fall	N	86	(84)	87		87	(85)	87		86	(83)	86	
MAT Elementary--Spring	BMS†	159.01		391.47		610.76		572.62		328.72		546.43	
	WMS‡	33.33		81.96		64.15		113.28		38.29		72.38	
	F Ratio	4.77*		4.78*		9.52*		5.06*		8.58*		7.55*	
F-S Correlations				0.62				0.56				0.77	
Grade 6	Mean	63.70	67.0	66.98	-0.04	59.82	66.0	64.67	-1.62	60.83	66.0	65.02	-1.73
3 Sites	S. Dev	7.97		8.24		10.12		11.55		8.83		9.27	
MAT Elementary--Fall	N	88	(88)	89		88	(88)	89		88	(88)	89	
MAT Elementary--Spring	BMS†	684.16		278.82		892.60		811.13		838.64		495.86	
	WMS‡	48.94		63.05		83.83		117.53		60.15		76.44	
	F Ratio	13.98*		4.42*		10.65*		6.90*		13.94*		6.49*	
F-S Correlations				0.81				0.75				0.82	

* $p \leq 0.05$.

† BMS = Between Mean Square.

‡ WMS = Within Mean Square.

Table 21

DESCRIPTIVE STATISTICS FOR IRIT BY GRADE

(Numbers in Parentheses are the Numbers of Children for Whom Both Fall and Spring Data Are Available)

IRIT		Word Knowledge (1)				Reading (2)				Total Reading (6)			
		Fall	Exp	Spring	t	Fall	Exp	Spring	t	Fall	Exp	Spring	t
Grade 3	Mean	54.09	59.5	56.62	-3.01	49.89	52.0	54.38	2.82	49.94	53.0	54.75	2.58
3 Sites	S. Dev	9.42		7.13		9.73		8.22		8.37		7.11	
MAT Primary I--Fall	N	64	(63)	65		64	(63)	65		64	(63)	65	
MAT Primary II--Spring	BMS†	831.45		244.95		904.54		582.15		803.00		366.97	
	WMS‡	64.34		44.57		68.08		50.99		46.06		40.29	
	F Ratio	12.92*		5.50*		13.29*		11.42*		17.43*		9.11*	
F-S Correlations				0.58				0.71				0.75	
Grade 4	Mean	56.52	62.0	61.65	-0.54	54.28	59.0	56.78	-2.55	54.46	60.0	58.55	-2.89
3 Sites	S. Dev	4.85		7.02		7.44		8.22		5.54		6.55	
MAT Primary II--Fall	N	50	(49)	49		50	(49)	49		50	(49)	49	
MAT Elementary--Spring	BMS†	52.49		168.27		125.10		67.34		71.21		116.72	
	WMS‡	22.24		44.10		52.38		67.65		29.02		39.67	
	F Ratio	2.36		3.82*		2.39		1.00		2.45		2.94	
F-S Correlations				0.76				0.69				0.84	

* $p \leq 0.05$.

† BMS = Between Mean Square.

‡ WMS = Within Mean Square.

Table 2

DESCRIPTIVE STATISTICS
(Numbers in Parentheses Are the Numbers of Children f

HIT		Word Knowledge (1)				Reading (2)				Math Computation (3)			
		Fall	Exp	Spring	t	Fall	Exp	Spring	t	Fall	Exp	Spring	t
Grade 6	Mean	56.48	60.0	59.48	-0.68	56.61	65.0	59.96	-3.51	69.87	75.0	74.43	-0.
1 Site	S. Dev	8.07		6.91		10.53		9.61		6.86		10.29	
MAT Elementary--Fall	N	23	(23)	23		23	(23)	23		23	(23)	23	
MAT Elementary--Spring	BMS*												
	WMS†	65.17		47.72		110.98		92.32		47.03		105.89	
	F Ratio												
F-S Correlations				0.89				0.77				0.77	
Grade 7	Mean	76.17	77.0	79.98	5.03	74.66	77.0	77.19	0.22	79.98	80.0	87.71	7.
1 Site	S. Dev	8.18		9.23		8.80		9.57		9.20		9.27	
MAT Intermediate--Fall	N	53	(52)	52		53	(52)	52		51	(51)	51	
MAT Intermediate--Spring	BMS*												
	WMS†	66.99		85.27		77.46		91.65		84.66		85.93	
	F Ratio												
F-S Correlations				0.88				0.74				0.69	

*BMS = Between Mean Square.

†WMS = Within Mean Square.

Table 23

DESCRIPTIVE STATISTICS F
(Numbers in Parentheses Are the Numbers of Children fo

R-3		Word Knowledge (1)				Reading (2)				Math Computation (3)			
		Fall	Exp	Spring	t	Fall	Exp	Spring	t	Fall	Exp	Spring	t
Grade 7	Mean	76.36	77.0	79.32	5.43	77.19	79.0	80.92	2.97	87.59	90.0	90.11	0.1
4 Sites	S. Dev	13.36		13.51		14.20		14.38		12.00		12.37	
MAT Intermediate--Fall	N	190	(190)	192		190	(190)	192		190	(190)	192	
MAT Intermediate--Spring	BMS*	679.70		438.51		657.19		655.22		463.57		193.91	
	WMS†	170.32		178.38		194.40		199.72		138.92		152.42	
	F Ratio	3.99‡		2.46		3.38‡		3.28‡		3.34‡		1.27‡	
F-S Correlations				0.90				0.80				0.71	

*BMS = Between Mean Square.

†WMS = Within Mean Square.

$^\ddagger p \leq 0.05$.

Table 22

CRIPTIVE STATISTICS FOR HIT BY GRADE
mbers of Children for Whom Both Fall and Spring Data Are Available)

Computation (3)			Math Concepts (4)				Math Problem Solving (5)				Total Reading (6)				Total Math (7)			
Exp	Spring	t	Fall	Exp	Spring	t	Fall	Exp	Spring	t	Fall	Exp	Spring	t	Fall	Exp	Spring	t
75.0	74.43	-0.41	59.65	62.0	65.30	2.56	65.30	72.0	70.04	-1.30	54.91	60.0	58.26	-2.00	68.78	74.0	73.74	-0.30
	10.29		11.55		9.19		10.63		10.32		9.02		7.58		9.62		9.83	
(23)	23		23	(23)	23		23	(23)	23		23	(23)	23		23	(23)	23	
	105.89		133.33		84.49		113.04		106.59		81.45		57.38		92.45		96.57	
	0.77				0.85				0.76				0.89				0.91	
80.0	87.71	7.39	79.73	80.0	84.33	5.47	77.61	80.0	82.39	2.30	75.40	76.0	78.55	6.00	83.47	86.0	88.86	4.56
	9.27		8.92		10.44		9.37		10.41		8.11		8.70		7.02		8.34	
(51)	51		51	(51)	51		51	(51)	51		53	(52)	52		51	(51)	51	
	85.93		79.56		108.95		87.80		108.36		65.71		75.76		49.29		69.60	
	0.69				0.84				0.72				0.92				0.84	

Table 23

RIPTIVE STATISTICS FOR R-3 BY GRADE
mbers of Children for Whom Both Fall and Spring Data Are Available)

Computation (3)			Math Concepts (4)				Math Problem Solving (5)				Total Reading (6)				Total Math (7)			
Exp	Spring	t	Fall	Exp	Spring	t	Fall	Exp	Spring	t	Fall	Exp	Spring	t	Fall	Exp	Spring	t
90.0	90.11	0.17	84.59	85.0	88.70	6.49	83.32	86.0	87.19	1.70	76.74	77.0	80.36	7.42	89.20	90.0	92.95	6.61
	12.37		13.88		14.46		13.48		13.61		14.00		14.51		12.07		12.80	
(190)	192		182	(182)	191		182	(182)	191		190	(190)	192		182	(182)	191	
	193.91		731.57		577.32		270.11		145.00		776.07		619.25		457.01		316.30	
	152.42		183.67		203.20		180.12		185.76		186.78		204.10		140.37		161.29	
	1.27‡		3.98‡		2.84‡		1.50		0.78		4.16‡		3.03‡		3.26‡		1.96	
	0.71				0.83				0.73				0.90				0.86	

		Word Knowledge (1)					Reading (2)					
	NR*/NM†	Gain Over Fall	Gain Over Expected Gain	t Test	Meets Criterion Growth	Meets Norm Growth	Gain Over Fall	Gain Over Expected Gain	t Test	Meets Criterion Growth	Meets Norm Growth	Gain Over Fall
Grade 2												
Catch-Up 1	25/25	7.00	-3.50	-3.14	No	No	8.58	-0.35	-0.29	No	Unknown	
Catch-Up 2	6/8	7.43	-4.29	-1.18	No	No	6.14	-0.43	-0.21	No	Unknown	
Catch-Up 3	8/8	13.13	2.13	0.74	No	Unknown	7.13	1.38	0.59	No	Unknown	
Catch-Up 5	5/3	16.80	5.60	2.63	Unknown	Unknown	8.20	-0.40	-0.16	No	Unknown	
Grade 3												
Catch-Up 3	9/7	5.11	1.56	0.96	No	Unknown	4.33	1.67	1.07	No	Unknown	
Catch-Up 5	9/10	3.83	-1.50	-0.39	No	Unknown	1.79	-0.60	-0.34	No	Unknown	
Grade 4												
Catch-Up 1	37/36	1.37	-4.08	-4.12	No	No	2.16	-2.47	-1.87	No	Unknown	1.95
Catch-Up 2	10/12	3.70	-2.00	-1.47	No	Unknown	0.70	-4.60	-2.37	No	No	4.75
Catch-Up 3	8/8	3.63	-1.38	-1.15	No	Unknown	12.50	4.75	2.02	Unknown	Unknown	13.13
Catch-Up 4	9/11	1.86	-3.70	-2.15	No	Unknown	3.99	-1.90	-0.57	No	Unknown	15.00
Catch-Up 5	5/5	12.40	8.20	2.07	Unknown	Unknown	1.40	-1.80	-0.45	No	Unknown	1.00
Grade 5												
Catch-Up 3	6/7	5.38	-0.33	-0.19	No	Unknown	9.07	1.50	0.74	No	Unknown	11.72
Catch-Up 4	8/12	5.50	0.50	0.38	No	Unknown	3.63	-2.50	-1.08	No	Unknown	12.31
Catch-Up 5	5/3	6.00	2.50	1.19	No	Unknown	6.00	-0.40	-0.17	No	Unknown	11.33
Grade 6												
Catch-Up 2	10/7	3.79	2.91	-2.26	No	Unknown	3.04	-6.36	-2.62	No	No	12.84
Catch-Up 3	8/9	6.26	2.38	1.75	No	Unknown	4.04	-1.63	-0.77	No	Unknown	2.56
Catch-Up 4	13/6	3.28	-0.15	0.18	No	Unknown	2.49	-4.1[illegible]	-3.43	No	No	9.33
Catch-Up 5	6/5	8.67	4.17	2.01	Unknown	Unknown	5.00	0	0	No	Unknown	0.77
Grade 6												
HIT 1	23/22	3.00	-0.52	-0.68	No	Unknown	3.35	-5.04	-3.51	No	No	4.57
Grade 7												
HIT 2	52/51	3.81	3.98	6.71	Unknown	Yes	2.53	0.19	0.21	No	Unknown	7.73
Grade 7												
R-3 (1)	45/43	3.76	3.44	3.52	No	Yes	6.91	5.33	3.08	Unknown	Yes	5.53
R-3 (2)	52/50	3.77	3.83	5.05	Unknown	Yes	2.75	1.60	1.38	No	Unknown	2.02
R-3 (3)	47/45	2.04	1.08	1.33	No	Unknown	2.83	2.67	2.44	No	Yes	0.18
R-3 (4)	46/44	2.10	1.21	1.31	No	Unknown	2.59	2.02	1.79	No	Unknown	2.46

*NR = Number of children for whom Total Reading scores are available for both fall and spring.

†NM = Number of children for whom Total Math scores are available for both fall and spring.

‡Undetermined.

Table 24

RESULTS OF THE NORM REFERENCED ANALYSIS FOR CATCH-UP, HIT, AND R-3 PROJECTS

		Math Computation (3)					Math Concepts (4)					Math Problem Solving (5)				
s ion th	Meets Norm Growth	Gain Over Fall	Gain Over Expected Gain	t Test	Meets Criterion Growth	Meets Norm Growth	Gain Over Fall	Gain Over Expected Gain	t Test	Meets Criterion Growth	Meets Norm Growth	Gain Over Fall	Gain Over Expected Gain	t Test	Meets Criterion Growth	Meets Norm Growth
	Unknown															
	Unknown															
	Unknown															
	Unknown															
	Unknown															
	Unknown															
	Unknown	1.95	-6.53	-4.34	No	No	1.24	-5.46	-3.88	No	No	-0.01	-6.87	-3.41	No	No
	No	4.75	-4.17	-1.67	No	Unknown	2.17	-4.33	-2.78	No	No	4.17	-0.67	-0.35	No	Unknown
wn	Unknown	13.13	4.13	1.63	Unknown	Unknown	9.00	1.88	0.74	No	Unknown	9.00	3.25	1.40	No	Unknown
	Unknown	15.00	8.36	3.58	Yes	Yes	14.18	7.82	5.11	Yes	Yes	12.46	7.27	3.90	Unknown	Yes
	Unknown	1.00	-9.60	-2.38	No	Unknown	7.80	1.20	0.37	No	Unknown	6.00	-1.40	-0.78	No	Unknown
	Unknown	11.72	5.43	2.82	Unknown	Yes	3.29	-1.57	-0.36	No	Unknown	4.00	0.57	0.10	No	Unknown
	Unknown	12.31	6.39	3.12	Unknown	Yes	3.29	-0.46	-0.68	No	Unknown	6.62	3.54	1.34	No	Unknown
	Unknown	11.33	--	‡	--	--	8.60	5.60	0.57	Unknown	Unknown	17.60	--	‡	--	--
	No	12.84	7.27	2.94	Unknown	Yes	6.18	3.18	0.84	No	Unknown	1.22	--	‡	--	--
	Unknown	2.56	-2.59	-1.00	No	Unknown	3.89	1.22	0.40	No	Unknown	-1.22	-6.67	-1.18	No	Unknown
	No	9.33	4.83	1.49	Unknown	Unknown	6.33	2.33	0.75	No	Unknown	6.50	3.00	1.34	No	Unknown
	Unknown	0.77	-5.83	-3.96	No	No	2.27	-1.83	-1.45	No	Unknown	11.70	9.50	5.56	Yes	Yes
	No	4.57	-0.57	-0.41	No	Unknown	5.65	3.30	2.56	No	Yes	4.74	0.04	0.03	No	Unknown
	Unknown	7.73	7.71	7.54	Yes	Yes	4.61	4.33	5.47	Unknown	Yes	4.78	2.39	2.30	Unknown	Yes
wn	Yes	5.53	3.20	2.17	No	Yes	5.70	5.98	5.24	Unknown	Yes	2.93	0.47	-0.28	No	Unknown
	Unknown	2.02	0.40	0.44	No	Unknown	4.05	3.83	3.97	Unknown	Yes	4.91	2.81	2.36	No	Yes
	Yes	0.18	-2.56	-1.55	No	Unknown	1.88	2.17	2.01	No	Yes	3.28	6.15	5.11	Unknown	Yes
	Unknown	2.46	0.68	0.59	No	Unknown	4.85	4.39	3.04	Unknown	Yes	4.18	2.61	1.59	No	Unknown

JECTS

	Math Problem Solving (5)					Total Reading (6)					Total Math (7)				
h	Gain Over Fall	Gain Over Expected Gain	t Test	Meets Criterion Growth	Meets Norm Growth	Gain Over Fall	Gain Over Expected Gain	t Test	Meets Criterion Growth	Meets Norm Growth	Gain Over Fall	Gain Over Expected Gain	t Test	Meets Criterion Growth	Meets Norm Growth
						7.23	-0.40	-0.24	No	No	17.92	6.89	3.28	Unknown	Yes
						6.57	-2.42	-1.14	No	Unknown	8.00	-3.75	-2.34	No	Unknown
						8.50	-1.00	-0.60	No	Unknown	13.63	-1.13	-0.68	No	Unknown
						9.20	-0.60	-0.82	No	Unknown	5.00	-4.00	-1.63	No	Unknown
						5.33	3.11	5.39	No	Yes	9.14	3.14	1.66	No	Unknown
						2.93	-0.90	-0.51	No	Unknown	5.30	-4.60	-1.14	No	Unknown
	-0.01	-6.87	-3.41	No	No	1.97	-3.47	-3.50	No	No	0.67	-6.66	-5.92	No	No
	4.17	-0.67	-0.35	No	Unknown	2.80	-1.70	-0.99	No	Unknown	4.92	-4.00	-2.58	No	No
n	9.00	3.25	1.40	No	Unknown	6.50	1.38	0.89	No	Unknown	11.00	0.13	0.06	No	Unknown
	12.46	7.27	3.90	Unknown	Yes	2.54	-1.90	-0.75	No	Unknown	15.91	8.46	8.06	Yes	Yes
n	6.00	-1.40	-0.78	No	Unknown	6.40	1.20	0.86	No	Unknown	7.20	-1.20	-0.32	No	Unknown
n	4.00	0.37	0.10	No	Unknown	7.55	1.83	1.13	No	Unknown	7.00	0.29	0.14	No	Unknown
n	6.62	3.54	1.34	No	Unknown	5.13	0.13	0.10	No	Unknown	7.81	3.23	2.67	Unknown	Yes
n	17.60	--	‡	--	--	6.80	1.40	0.74	No	Unknown	12.87	--	‡	--	--
n	1.22	--	‡	--	--	3.24	-1.36	-0.89	No	Unknown	7.35	-0.36	-0.26	No	Unknown
n	-1.22	-6.67	-1.18	No	Unknown	5.10	0.88	0.81	No	Unknown	2.56	-4.67	-1.50	No	Unknown
n	6.50	3.00	1.34	No	Unknown	2.99	-1.08	-1.23	No	Unknown	7.67	3.50	1.51	No	Unknown
n	11.70	9.50	5.56	Yes	Yes	7.50	3.50	1.36	No	Unknown	5.67	3.17	1.92	No	Unknown
	4.74	0.04	0.03	No	Unknown	3.35	-1.74	-2.00	No	Unknown	4.96	-0.26	-0.30	No	Unknown
	4.78	2.39	2.30	Unknown	Yes	3.26	3.65	8.26	No	Yes	5.39	3.86	6.15	Unknown	Yes
	2.93	0.47	-0.28	No	Unknown	5.64	6.11	5.25	Unknown	Yes	5.30	5.17	4.85	Unknown	Yes
	4.91	2.81	2.36	No	Yes	3.62	2.17	2.87	No	Yes	3.83	2.37	3.24	No	Yes
	3.28	6.15	5.11	Unknown	Yes	2.64	2.71	3.47	No	Yes	1.90	0.77	1.07	No	Unknown
	4.18	2.61	1.59	No	Unknown	2.55	2.83	1.44	No	Unknown	3.98	3.41	3.13	No	Yes

Table 25

RESULTS OF THE NORM REFERENCED ANALYSIS FOR CONQUEST AND IRIT PROJECTS

		Word Knowledge (1)					Reading (2)					Total Reading (6)				
	NR*	Gain Over Fall	Gain Over Expected Gain	t Test	Meets Criterion Growth	Meets Norm Growth	Gain Over Fall	Gain Over Expected Gain	t Test	Meets Criterion Growth	Meets Norm Growth	Gain Over Fall	Gain Over Expected Gain	t Test	Meets Criterion Growth	Meets Norm Growth
Grade 2																
Conquest 1	15	13.30	1.87	1.42	No	Unknown	8.77	3.27	1.82	No	Unknown	10.99	1.87	1.46	No	Unknown
Conquest 2	21	10.04	1.10	0.66	No	Unknown	11.46	2.60	1.47	No	Unknown	10.19	1.74	1.15	No	Unknown
Conquest 3	42	11.52	-0.18	-0.12	No	Unknown	8.13	-0.18	-0.17	No	Unknown	9.28	-1.09	-1.15	No	Unknown
Grade 3																
IRIT 1	22	-0.55	-5.59	-3.03	No	No	2.77	0	0	No	Unknown	2.55	-1.64	-1.14	No	Unknown
IRIT 2	16	2.97	-1.22	-0.84	No	Unknown	7.82	5.94	3.34	Unknown	Yes	6.15	3.33	2.56	No	Yes
IRIT 3	25	4.86	2.24	1.62	No	Unknown	3.81	2.62	2.57	No	Yes	5.91	3.72	5.21	No	Yes
Grade 4																
Conquest 1	23	4.42	-0.83	-0.79	No	Unknown	4.92	-0.96	-0.38	No	Unknown	4.96	-0.09	-0.08	No	Unknown
Conquest 2	23	3.01	-2.78	-2.51	No	No	5.32	-0.96	-0.60	No	Unknown	3.32	-1.35	-1.22	No	Unknown
Conquest 3	37	5.45	1.24	0.83	No	Unknown	4.92	0.58	0.40	No	Unknown	5.11	0.11	0.11	No	Unknown
Grade 4																
IRIT 1	21	6.29	1.43	1.36	No	Unknown	1.99	-2.33	-2.10	No	No	4.49	-0.14	-0.18	No	Unknown
IRIT 2	12	5.58	1.17	1.25	No	Unknown	4.42	-0.25	-0.17	No	Unknown	5.25	0.17	0.15	No	Unknown
IRIT 3	16	3.38	-0.63	-0.55	No	Unknown	1.88	-2.94	-1.46	No	Unknown	2.81	-2.19	-2.94	No	No
Grade 6																
Conquest 1	23	3.70	0.09	0.10	No	Unknown	6.48	0.17	0.15	No	Unknown	4.96	0.17	0.19	No	Unknown
Conquest 2	17	6.96	2.67	1.63	No	Unknown	6.62	0.50	0.24	No	Unknown	7.22	2.28	1.61	No	Unknown
Conquest 3	48	1.85	-1.90	-2.83	No	No	3.60	-2.27	-1.87	No	Unknown	2.88	-1.81	-2.19	No	No

*NR = Number of children for whom total reading scores are available for both fall and spring.

In the next paragraphs, we sketch what the criterion for each of the PIPs might have looked like had the procedures for the original sites been followed.

Catch-Up--The original program was evaluated on the basis of 1971-72 data using the Cooperative Primary Reading Test for grades 1, 2, and 3. The project passed the 1/3 standard deviation criterion on this test at grades 1 and 2. In Math it passed at grades 1 and 3.

For 1971-72 data on grades 4, 5, and 6, the California Test of Basic Skills (CTBS) was used for evaluation purposes. Only grade 4 passed either Reading or Math. Grades 5 and 6 did not pass either.

In 1972-73, the MAT was used for grades 1, 2, and 3. In an evaluation based on these data, grade 3 passed Reading. The other grades had inadequate data to reach a decision. For this year the CTBS was again used for grades 4, 5, and 6. Grade 5 passed Reading and grades 4 and 5 passed Math. Thus at one time or another, all grades except the first grade failed to meet the criterion.

Conquest--Conquest was not examined on the basis of a normed test.

HIT--Grade 6 was evaluated for HIT on the basis of 1971-72 Wide Range Achievement Test data. The HIT pupils were judged against the mean change of the age specific norms. As will be seen below, there is reason to believe that this is a less rigorous test than the equal percentile expectation. Data were inadequate for the evaluation of grade 7.

IRIT--IRIT was evaluated using 1972-73 data from the California Achievement Test. Grade 3 was successful. Data were inadequate for evaluation of 4th graders.

PTR*

R-3--R-3 was evaluated using 1970-71 and 1971-72 data on the CTBS. Eighth grade children's scores were examined and the two-year gains in Reading passed the criterion. Gains in Math did not.

Data collected in 1972-73 on seventh graders were also examined. The seventh grade Reading gains did not pass the criterion, but the Math gains did.

Thus, in only one project, Catch-Up, was the MAT battery used and then only for grades 1 through 3 during 1972-73. Only grade 3 passed the criterion.

Whether the PIP projects could pass the original criteria is an open question. It seems possible that if the original program had been tested with the MAT under the same conditions and had been tried on the PIP criteria, they might not have fared much better than the PIP field-test projects.

Some Properties of the Equal Percentile Growth Criterion

The definition of criteria of educational significance has been long overdue. Although the state of the art of educational evaluation is such that most evaluators include tests of statistical significance, it is not at the point where most evaluators discuss the educational significance of student achievement gains. RMC described the "1/3 SD over expected posttest score" as a minimum gain by which they could gauge educational significance. They felt that it could be used as a heuristic index until some improved standards of educationally significant gains in reading and mathematics were defined. RMC recognized that detecting educational significance is a central problem in any effort to disseminate innovative projects on a rational basis. The possibility must be faced that there are no innovations worthy of dissemination.

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*PTR is not reported here because it is not included in our norm referenced analysis. However, for five sites, including the replication site, previous PTR evaluation data are available for tutored and control groups. The data show statistically significant results in favor of the tutored groups.

The use of some criterion of educational significance to select programs suitable for PIPs has come to be one of the important features of the PIP concept. It is consequently worth examining the properties of the criterion used in this study, both because of the light it may shed on such criteria in general, and because the properties of the criterion have not been examined elsewhere. Is the criterion, for example, unrealistically high?

The criterion applied in the norm referenced analyses has two components. The first is the means of defining the no treatment expectation. This is done by determining equal percentile growth in the group mean standard score. The other is the amount to be added to that expectation to achieve educational significance. This is set at one-third of the norm group standard deviation.

These factors combine with the way in which PIP pupils are selected to determine the criterion's distributional properties, and to help establish what statistical tests may be used to test for its achievement.

In each of these areas, it is possible that ignorance of the properties of the criterion would lead to the mistaken rejection of worthwhile projects. In the following sections we discuss several examples. The way students are selected for the PIPs, and the nonlinearity of the standard-score-to-percentile conversion may mean that the normal theory confidence intervals are actually too short. This would mean that the confidence coefficient for each of the tests showing failure is less than 95%. Asking for one-third of a standard deviation's growth is asking for different amounts of change (in percentile terms), depending on whether change starts from a tail of the distribution or from the center. It may be more difficult for the PIP children at the very bottom of the distribution to move up. Lastly, it is also quite possible that the expected growth for these children is not that they maintain their percentile from fall to spring. Obviously, if their percentiles would ordinarily be expected to move down if they were not participating in a special project, then the analysis model by which they were evaluated is too severe.

The statistical issues that arise will not be discussed in depth here. However, it should be noted that statistical problems will eventually have to be addressed to obtain a useful criterion. The statistical tests used for the analysis of our field test results have some features that raise questions. Some of these involve the problem of how sampling errors in the norms should be handled. In the analysis, the norms were assumed to be known exactly. If measurement errors for them were included, it would certainly make it more difficult to show negative results. The questions also involve referring to the norm group distribution, when we are dealing with the averages. Since average growth is being assessed, it seems reasonable that the one-third standard deviation ought to be one-third the standard deviation of the mean. Since this is $\sigma/(3\sqrt{n})$, where n is the sample size and σ is the norm group standard deviation, such a change would make it easier to achieve educational significance. It is evident that incorporating these changes in the statistical treatment of the gains could alter the results without altering the two-part criterion, just its estimator.

Since the PIP analysis is the first to use this criterion on the MAT battery extensively, several analyses were done to assess the criterion's difficulty as applied to the Total Reading and Total Math scores. Figures 17 and 18 graphically show the results of the Total Reading and Total Math analysis for data pooled across projects within

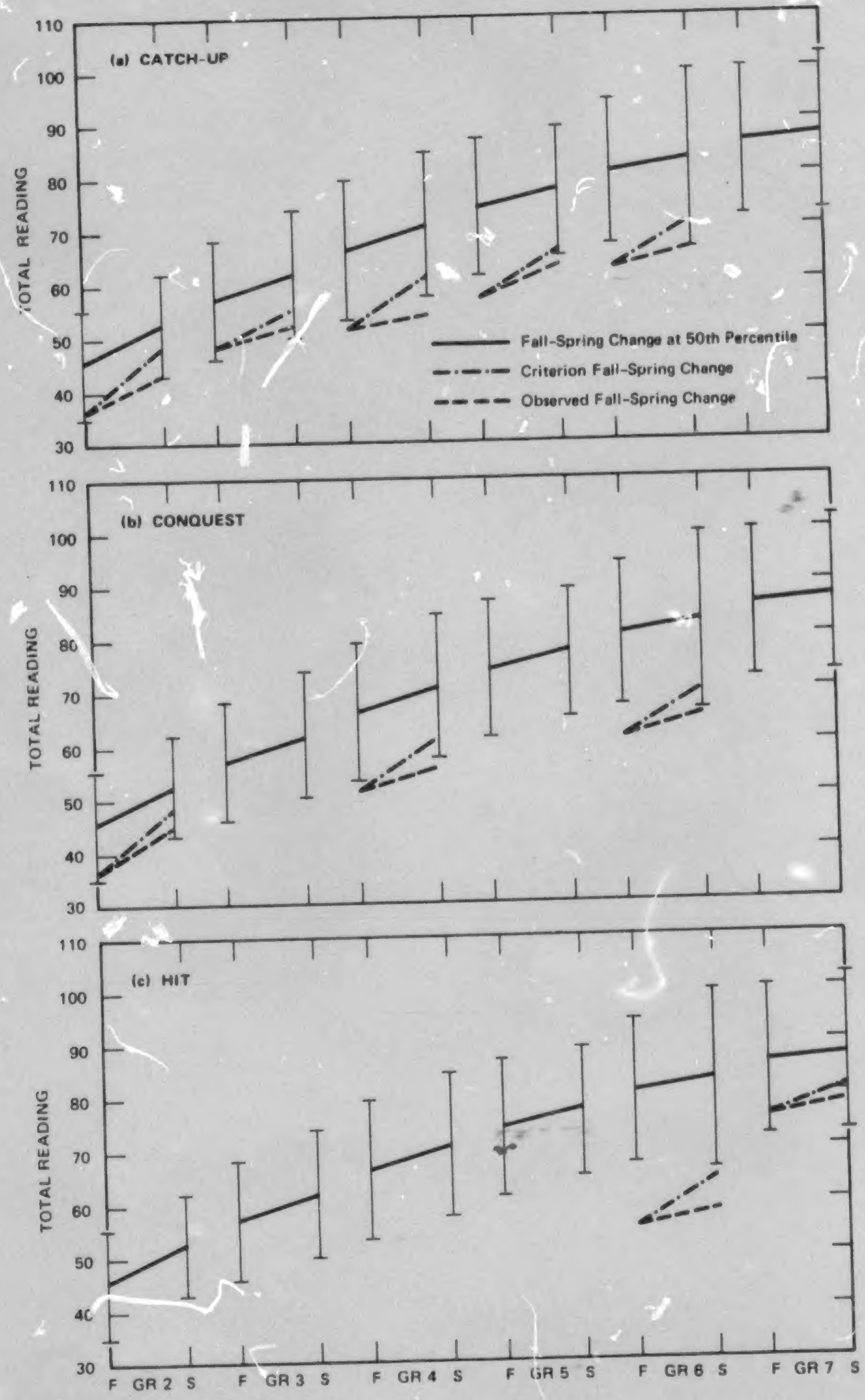

FIGURE 17 OBSERVED AND CRITERION GROWTH FOR TOTAL READING

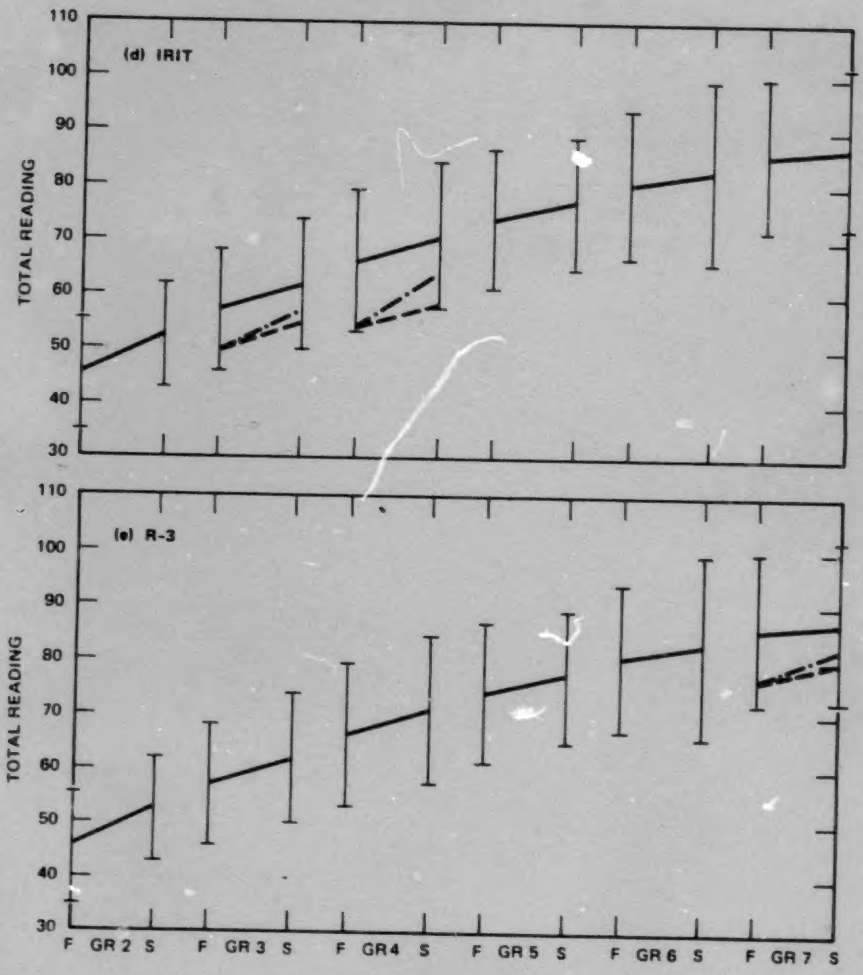

FIGURE 17 OBSERVED AND CRITERION GROWTH FC.. TOTAL READING (Concluded)

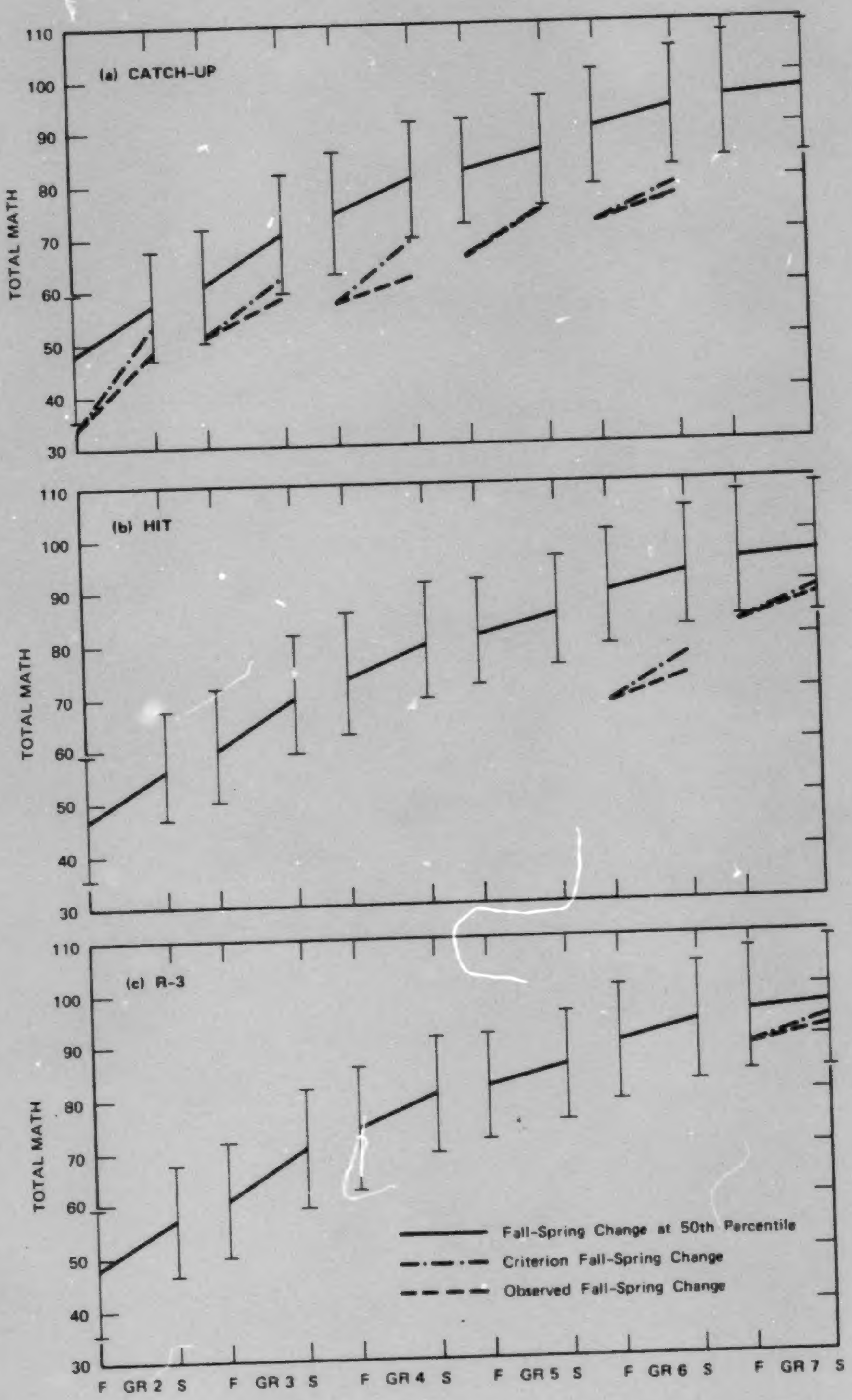

FIGURE 18 OBSERVED AND CRITERION GROWTH FOR TOTAL MATH

PIP and grade. The slope of the solid line shows the growth in standard score units required to stay at the 50th percentile. The slope of the dashed line shows the observed gain for the PIP participants, and the slope of the remaining line shows the gain required to meet the criterion.

Inspection of these figures suggests that relative to the center of the distribution, the criterion for educational significance is stringent. In fact, the average amount of criterion gain required at the seventh grade for Total Reading is six times the normal seventh grade growth at the 50th percentile. At grades 4 and 5 it is twice as much, and at grade 2 it is almost twice as much. A similar picture prevails for Total Math, where the average criterion gain is from two to four times greater than the gain required at the 50th percentile. Obviously from this point of view, the criterion is not of uniform severity. It does not seem to be desirable for the criterion to require larger gains relative to the 50th percentile in the higher grades.

The estimate of the criterion's difficulty changes if we use the average standard score gain of children in the first three stanines of a norm group as a standard.* On this standard, the average amount of growth which would be considered educationally significant is approximately constant over grades for both Total Reading and Total Math. It is about 0.96 of the observed low-norm-group average gain for Total Reading with a standard deviation of 0.15. For Total Math, it is about 0.86 of the observed low norm group average gain with a standard deviation of 0.2. In short, the average amount of growth required of the PIP projects was, on the whole, less than what was observed in the bottom 23% of this MAT norm group.

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*These were obtained from Michael D. Beck, Development of Empirical "Growth Expectancies" for the Metropolitan Achievement Tests, presented at the 1975 convention of the National Council on Measurement in Education. For this study Beck identified, within the group on which the national norms were based, several subgroups of children who had taken both the pretest and posttest.

This result is due to the fact that for none of the PIPs was the difference between fall and spring average standard scores as great as that seen in the first three stanines of the MAT norm group. Table 26 shows the relevant proportions by PIP and grade. Table 27 shows the same differences as a proportion of the criterion gain. It seems that adding one-third of a standard deviation onto the equal percentile growth of the PIP children would bring them up to only about the average gain for the bottom 23% of the norms.

This suggests that the PIP children cannot be regarded as a sample from even a truncated norm group. Their growth in standard score units is even slower than that of the children in the first quartile of the MAT norm group; hence, relative to the norms, these children straggled behind their age mates in standard score growth. And, by implication, they will straggle behind in equal percentage growth as well.

The Straggler Hypothesis

It is a guess, then, that the PIP participants overrepresent the kind of pupils who lose ground from year to year. For convenience they are called stragglers, since in educational systems that refuse to hold back a nonachieving student, these students' standard scores remain behind those of their grade mates. For these students the pattern of percentile growth is negative, since each year that they are (inappropriately) promoted, they fall farther behind.

During the field test, we did not inquire into whether children selected for participation had been held back or promoted;* hence, there

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*Projects were to have followed procedures for student selection described in PIP instructions.

Table 26

DIFFERENCE BETWEEN FALL AND SPRING PIP STANDARD SCORE AVERAGES AS A PROPORTION OF LOW-NORM-GROUP AVERAGE GAINS

	Total Reading				Total Math			
	Average Spring	Average Fall	Low Norm Gain	Proportion	Average Spring	Average Fall	Low Norm Gain	Proportion
Catch-Up								
Grade 2	43.5	35.93	12.6	0.60	48.66	33.93	16.0	0.92
Grade 3	52.58	48.22	6.6	0.66	58.41	50.84	12.7	0.60
Grade 4	54.17	51.21	8.7	0.34	62.14	56.95	12.4	0.42
Grade 5	63.47	56.80	13.0	0.51	74.60	65.55	13.9	0.65
Grade 6	66.39	62.36	10.6	0.38	77.16	71.93	10.4	0.50
Conquest								
Grade 2	45.62	35.83	12.6	0.78				
Grade 4	55.70	51.29	8.7	0.51				
Grade 6	62.02	60.83	10.6	0.40				
HIT								
Grade 6	58.26	54.91	10.6	0.32	73.74	68.78	10.4	0.48
Grade 7	78.65	75.40	5.2	0.63	88.86	83.47	7.5	0.72
IRIT								
Grade 3	54.75	49.94	6.6	0.73				
Grade 4	58.55	54.46	8.7	0.47				
R-3								
Grade 7	80.36	76.74	5.2	0.70	92.95	89.20	7.5	0.50

Table 27

DIFFERENCE BETWEEN FALL AND SPRING PIP STANDARD SCORE AVERAGES AS A PROPORTION OF CRITERION GAIN

	Total Reading				Total Math			
	Average Spring	Average Fall	Expected	Proportion	Average Spring	Average Fall	Expected	Proportion
Catch-Up								
Grade 2	43.5	35.93	45.5	0.60	48.66	33.93	49.0	0.77
Grade 3	52.58	48.22	51.0	0.64	58.41	50.84	58.0	0.68
Grade 4	54.17	51.21	57.0	0.30	62.14	56.95	65.0	0.43
Grade 5	63.47	56.80	62.0	0.73	74.60	65.55	71.0	1.07
Grade 6	66.39	62.36	67.0	0.47	77.16	71.93	75.0	0.74
Conquest								
Grade 2	45.62	35.83	45.5	0.77				
Grade 4	55.70	51.29	57.0	0.45				
Grade 6	65.02	60.83	66.0	0.46				
HIT								
Grade 6	58.26	54.91	60.0	0.37	73.74	68.78	74.0	0.54
Grade 7	78.65	75.40	76.0	0.58	88.86	83.47	86.0	0.83
IRIT								
Grade 3	54.75	49.94	53.0	0.68				
Grade 4	58.55	54.46	60.0	0.43				
R-3								
Grade 7	80.36	76.74	77.0	0.69	92.95	89.20	90.0	0.78

is no direct evidence that a high percentage of the pupils would be expected to lose on the norms. There is, however, some indirect evidence that this is the case.

If it is assumed that the children are homogeneous within PIP sites--that current second graders are like the fourth graders at that site two years ago--then the fall MAT percentile for a grade represents an estimate for the previous spring's percentile when no PIP treatment is applied. Since they are not longitudinal, these estimates are not very good. However, if these "no treatment" percentiles decrease as a function of grade, then there is some evidence that equal percentile growth is not the proper expectation for the PIP pupils.

To see if this is the case, a least squares line was fit to the fall percentiles for the Total Math and Total Reading scores for those sites in which at least two grade levels were tested. This procedure, with 33 observations, estimates an annual loss of about 2 percentiles for Reading. On 18 observations, the estimated annual decline is 3 percentiles for Math. Although the downward trend is obvious, these equations account for only about 10% of the variance. A slightly better fit for these data can be obtained by using an exponential function, since a decreasing sequence of percentile scores is bounded below. The exponential fits for Math and Reading show a coefficient of determination of about 0.15, and indicate that the rate of change of the percentiles is about $-0.2e^{-0.2g}$ where $g = 1,\ldots 6$. Neither of these results is consistent with the equal percentile expectation.

Another indirect check of the straggler hypothesis is obtained by noting that if the straggling students are not kept back in grade and not tracked into special classes, the distribution of fall standard scores would show some asymmetry, with more observations below the mean. In addition, if the policy of not holding slow students back in grade is maintained, it can be expected that the tail of the distribution will grow longer as the grade level increases.

As a check on the hypothesis, the skewness was calculated by grade for the fall Total Reading standard scores for those PIPs with projects at more than two grades. Of the twelve projects which met this condition, half the values were negative. Virtually all 12 showed evidence for the growth in the lower tail of the fall distribution as grade increased.

While the least squares lines and the skewness calculations by themselves do not prove that equal percentile growth is not the appropriate expectation for the PIP project participants, they are suggestive.

Certainly, the level of expectation to assume for this population and the statistic to use as a criterion of educational significance deserve more thought. However, this is not said to make excuses for the outcomes of the PIP field-test projects during their implementation year.

Local Evaluation Results

To put the above discussions in another perspective--one that reminds us of the level of sophistication of these effectiveness measures relative to those on which most day-to-day program decisions are made--we discuss below some of the local evaluation findings at the field-test projects. In addition, it will become clear in the sections on student and teacher attitudes which follow, that the projects achieved definite successes in terms of student interest and professional growth and pride.

The majority of administrative and teaching staff at the field-test sites felt that the projects were a considerable success. Information from interviews and from local evaluations performed in several of the field-test sites, indicates that the projects had raised achievement above expectations. At several field-test projects, evidence to this effect was assembled for the second-year grant applications and for end-of-year reports.

This evidence includes the number of criterion-referenced tests passed beyond teachers' expectations; improved letter grades given project participants by the regular classroom teachers; statistically significant pre- to post-test gain scores on tests given by teachers; and personal ratings by project and nonproject staff. Results of the ISQ and ASQ are consistent with these latter rating results and with the testimonials. Sixty-seven percent of project teachers responding to a question about the proportion of participants gaining significantly in reading skills said that all or most of the children gained.

Using the California Achievement Test and the Botel Phonic Inventory, just prior to and just after each 10-week cycle, the IRIT 3 project reported that "all evidence...appears to indicate that a majority of students are excelling beyond normal expectations." In their second-year grant application, PTR 1 reported that the teacher-tutor progress report tabulation showed 87% of the 169 PTR students "greatly improved" in letter recognition, and 47% "greatly improved" in word recognition. The IRIT 2 project used the MAT and the Slossen Oral Reading Test administered just prior to each cycle and immediately after the termination of each cycle. The project reported a mean grade equivalent gain of 0.5 for the 10-week period, and state that "evidence indicated that the IRIT project is of great benefit to the children...who are involved." The Catch-Up 5 project compared math and reading scores with state norms and reported "the gains in reading and math are the highest on file."

There were also reports of no significant growth from some sites, notably R-3 (3), but in the majority of sites, the academic success of the projects is acknowledged, and the failure of the evaluators to find it this year would undoubtedly be attributed to a failure of the tests or a failure of the evaluators' methods.

Many explanations for the discrepancy between local and national evaluation results are possible. Many explanations are possible for our evaluation results themselves. During the second year of the field test, when achievement outcomes and their explanation are the primary focus of study, we plan to design an evaluation to explore several possibilities. We would like to be sure, through content analyses, that the subject matter of instruction in the PIP projects is the subject matter tested by the MAT. We expect students' test scores to be related to various "treatments" during the school year, so that we will document classroom and other project participation as well as the amount of time each student actually spends on tested subject matter in PIP project sessions. The measurement of the degree of implementation of the instructional programs will also be refined, so that this factor can be related to the levels of achievement attained at each project.

Student Attitude Outcomes

In Chapter III it was pointed out that the purpose of the attitude analysis during the PIP implementation year was to establish that treatment experienced by students during PIP project involvement did not diminish whatever favorable attitudes of interest existed at the time of the pretest. The formal measures on the Faces Attitude Inventory and the Coopersmith Self-Esteem Inventory administered at the beginning and end of the 1974-75 school year establish this; but only the PIP-specific Student Attitude Questionnaires, administered as a posttest, reveal some of the student interest and enthusiasm developed in nearly every project and observed by evaluators during the year.

Faces Attitude Inventory and Coopersmith Self-Esteem Inventory

The results on the Faces and Coopersmith inventories are displayed in Tables 28 through 31 under headings for "All Children." the data are pooled across projects by PIP and grade. As expained in Chapter III under Student Achievement Tests, these inventories include two types of questions. One type assesses the student's general attitude

Table 28

RESULTS OF FACES ATTITUDE INVENTORY
FOR SELECTED AND TOTAL LATA SETS

	Selected Children Total Faces Truth				All Children Total Faces Truth				Selected Children Total Faces				All Children Total Faces			
	Fall	Spring	Diff.	t Test for Fall-Spring Differences	Fall	Spring	Diff.	t Test for Fall-Spring Differences	Fall	Spring	Diff.	t Test for Fall-Spring Differences	Fall	Spring	Diff.	t Test for Fall-Spring Differences
Catch-Up Grade 2 4 Sites																
Mean	5.75	5.71	-0.05	-0.33	5.74	5.69	-0.05	-0.33	34.52	34.00	-0.52	-0.76	34.36	34.00	-0.52	-0.76
S. Dev	0.65	0.46	0.91		0.64	0.60	0.91		3.76	4.15	4.56		3.69	4.11	4.56	
N	44	44	44		47	45	44		44	44	44		47	45	44	
BMS*	0.40	0.33	0.31		0.34	0.33	0.31		5.60	18.02	14.32		6.80	17.91	14.32	
WMS†	0.43	0.35	0.87		0.42	0.36	0.87		14.75	17.20	21.30		14.06	16.79	21.30	
D of F‡	3 40	3 40	3 40		3 43	3 41	3 40		3 40	3 40	3 40		3 43	3 41	3 40	
F Ratio	0.94	0.93	0.35		0.82	0.92	0.35		0.38	1.05	0.67		0.48	1.07	0.67	
Conquest Grade 2 3 Sites																
Mean	5.68	5.59	-0.09	-0.[illegible]	5.64	5.54	-0.10	-0.79	34.54	34.54	00	0	34.58	34.48	0.04	0.06
S. Dev	0.70	0.79	0.90		0.80	0.93	1.15		4.29	4.73	5.36		4.22	4.64	5.30	
N	76	76	76		80	82	78		76	76	76		80	82	78	
BMS*	0.56	0.17	1.34		1.34	0.32	2.18		39.85	14.63	77.47		49.53	15.07	70.35	
WMS†	0.48	0.63	0.79		0.62	0.88	1.29		17.85	22.57	27.44		16.97	21.70	27.02	
D of F‡	2 73	2 73	2 73		2 77	2 79	2 75		2 73	2 73	2 73		2 77	2 79	2 75	
F Ratio	1.16	0.27	1.69		2.16	0.37	1.68		2.23	0.65	2.82		2.92	0.69	2.60	
PTR Grade 1 2 Sites (4 groups)																
Mean	5.09	5.43	0.34	5.55§	4.93	5.25	0.32	4.38§	29.49	33.49	2.66	3.51§	29.86	33.91	4.19	8.44§
S. Dev	0.97	0.89	1.09		1.16	1.18	1.34		13.62	9.20	13.43		9.13	5.54	9.21	
N	314	314	314		345	356	337		314	314	314		349	359	344	
BMS*	13.76	6.81	5.80		26.56	12.45	10.18		1814.36	412.14	162.66		1294.92	487.31	389.42	
WMS†	0.82	0.74	1.14		1.13	1.29	1.73		169.68	81.56	180.51		72.90	26.81	82.21	
D of F	3 310	3 310	3 310		3 341	3 352	3 333		3 310	3 310	3 310		3 345	3 355	3 340	
F Ratio	16.78‡	9.24‡	5.09		23.42‡	9.68‡	5.90		10.69‡	5.05	0.90		17.76‡	18.18‡	4.74	

*BMS = Between Mean Square

†WMS = Within Mean Square.

‡D of F = Numerator Degrees of Freedom
Denomerator Degrees of Freedom.

§$p \le 0.05$.

Table 29

RESULTS OF COOPERSMITH SELF ESTEEM-INVENTORY
FOR SELECTED AND TOTAL DATA SETS FOR CATCH-UP

Catch-Up	Selected Children Total Coopersmith Truth				All Children Total Coopersmith Truth				Selected Children Total Coopersmith				All Children Total Coopersmith			
	Fall	Spring	Diff.	t Test for Fall-Spring Differences	Fall	Spring	Diff.	t Test for Fall-Spring Differences	Fall	Spring	Diff.	t Test for Fall-Spring Differences	Fall	Spring	Diff.	t Test for Fall-Spring Differences
Grade 3																
2 sites																
Mean	12.17	13.50	1.33	4.00*	10.63	11.53	0.94	1.70	76.67	76.67	0	0	78.37	77.94	-1.71	-1.02
S. Dev	0.75	0.55	0.82		1.80	1.87	2.28		6.56	6.02	8.25		6.89	5.54	6.87	
N	6	6	6		19	17	17		6	6	6		19	17	17	
BMS†	0.08	0.75	0.33		0.37	1.78	3.13		10.08	0.08	12.00		12.47	10.54	177.82	
WMS‡	0.69	0.19	0.75		3.42	3.63	5.32		51.31	45.31	82.00		49.53	32.03	38.51	
D of F§	1 4	1 4	1 4		1 17	1 15	1 15		1 4	1 4	1 4		1 17	1 15	1 15	
F Ratio (for site differences)	0.12	4.00	0.44		0.11	0.49	0.59		0.20	0.00	0.15		0.25	0.33	4.62	
Grade 4																
5 sites																
Mean	12.13	12.45	0.32	1.72	10.82	11.[illegible]	0.28	1.22	78.97	81.71	2.74	2.39*	79.48	80.83	1.25	1.81
S. Dev	0.92	0.68	1.05		1.67	1.72	2.06		6.94	6.87	6.40		7.60	8.56	6.30	
N	31	31	31		84	84	83		31	31	31		84	84	83	
BMS†	1.70	0.52	2.19		3.36	2.87	2.34		68.16	37.42	73.62		184.88	170.85	25.90	
WMS‡	0.72	0.45	0.92		2.75	2.96	4.35		45.09	48.64	35.90		51.41	68.36	40.39	
D of F§	4 26	4 26	4 26		4 79	4 79	4 78		4 26	4 26	4 26		4 79	4 79	4 78	
F Ratio (for site differences)	2.37	1.15	2.37		1.23	0.97	0.54		1.51	0.77	2.05		3.56	2.50	0.64	
Grade 5																
3 sites																
Mean	12.90	13.30	0.40	2.45*	11.36	12.16	0.81	3.05*	80.40	85.20	4.80	2.76*	83.27	84.97	1.77	2.12*
S. Dev	0.74	0.48	0.52		1.45	1.34	1.47		8.50	8.66	5.49		7.88	8.47	4.65	
N	10	10	10		33	31	31		10	10	10		33	31	31	
BMS†	0.05	0.08	0.23		4.60	2.05	1.33		71.20	105.90	9.90		45.83	96.14	17.83	
WMS‡	0.69	0.28	0.28		1.95	1.79	2.22		72.57	66.26	35.97		63.16	69.95	21.92	
D of F§	2 7	2 7	2 7		2 30	2 28	2 28		2 7	2 7	2 7		2 30	2 28	2 28	
F Ratio (for site differences)	0.08	0.27	0.81		2.36	1.14	0.60		0.98	1.60	0.28		0.73	1.37	0.81	
Grade 6																
4 sites																
Mean	13.43	13.29	-0.14	-0.81	11.87	12.32	0.35	1.56	81.29	85.00	3.71	2.03	84.04	85.18	1.49	1.67
S. Dev	0.76	0.47	0.66		1.67	1.20	1.46		9.39	7.72	6.83		7.98	8.09	5.85	
N	14	14	14		45	44	43		14	14	14		45	44	43	
BMS†	1.26	0.11	0.67		0.85	0.42	2.25		82.21	159.16	36.27		144.14	342.14	27.30	
WMS‡	0.37	0.25	0.37		2.94	1.51	2.13		90.02	29.65	49.81		57.74	44.70	35.12	
D of F§	3 10	3 10	3 10		3 41	3 40	3 39		3 10	3 10	3 10		3 41	3 40	3 39	
F Ratio (for site differences)	3.44	0.45	1.79		0.29	0.28	1.06		0.91	5.37	0.73		2.50	7.65	0.63	

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* $p \le 0.05$.

† BMS = Between Mean Square.

‡ WMS = Within Mean Square.

§ D of F = Numerator Degrees of Freedom
Denominator Degrees of Freedom.

Table 30

RESULTS OF COOPERSMITH SELF-ESTEEM INVENTORY
FOR SELECTED AND TOTAL DATA SETS FOR CONQUEST AND HIT

	Selected Children Total Coopersmith Truth				All Children Total Coopersmith Truth				Selected Children Total Coopersmith				All Children Total Coopersmith			
	Fall	Spring	Diff.	t Test for Fall-Spring Differences	Fall	Spring	Diff.	t Test for Fall-Spring Differences	Fall	Spring	Diff.	t-Test for Fall-Spring Differences	Fall	Spring	Diff.	t Test for Fall-Spring Differences
Conquest																
Grade 4 3 sites																
Mean	11.81	12.67	0.85	4.48*	10.62	11.25	0.71	3.57*	80.63	81.96	1.33	0.84	81.33	82.33	0.96	1.15
S. Dev	0.92	0.83	0.99		1.61	1.61	1.83		7.46	7.21	8.23		7.74	8.06	7.68	
N	27	27	27		86	87	84		27	27	27		86	87	84	
BMS†	0.21	1.10	2.52		1.53	0.65	4.02		25.63	75.61	144.82		182.19	387.58	61.98	
WMS‡	0.82	0.66	0.85		2.62	2.63	3.35		58.21	49.99	61.27		56.97	57.34	58.88	
D of F§	2	2	2		2	2	2		2	2	2		2	2	2	
	24	24	24		83	84	81		24	24	24		83	84	81	
F Ratio	1.48	1.68	2.97		0.59	0.25	1.20		0.44	1.51	2.36		3.20	6.76	1.05	
Grade 6 3 Sites																
Mean	12.80	13.25	0.45	2.89*	11.78	11.94	0.19	1.01	79.03	79.58	0.55	0.51	80.80	83.03	2.21	3.06*
S. Dev	0.82	0.74	0.99		1.43	1.90	1.71		7.85	9.33	6.79		7.55	8.62	6.70	
N	40	40	40		88	87	86		40	40	40		88	87	86	
BMS†	0.37	0.44	0.51		8.78	2.24	2.21		52.05	67.55	65.98		244.21	310.44	26.03	
WMS‡	0.69	0.56	1.00		1.87	3.65	2.95		62.19	88.13	45.03		52.54	68.74	45.30	
D of F§	2	2	2		2	2	2		2	2	2		2	2	2	
	37	37	37		85	84	83		37	37	37		85	84	83	
F Ratio	0.54	0.79	0.51		4.68	0.61	0.75		0.84	0.77	1.47		4.65	4.52	0.57	
HIT																
Grade 6 1 Site																
Mean	11.21	12.26	1.05	3.29*	9.93	10.65	0.7[illegible]	2.31*	82.05	84.32	2.26	1.25	80.90	82.35	1.46	1.25
S. Dev	1.13	1.05	1.39		1.84	1.88	2.10		6.70	5.95	7.89		8.18	8.76	7.89	
N	19	19	19		46	46	46		19	19	19		46	46	46	
BMS†	0	0	0		0	0	0		0	0	0		0	0	0	
WMS‡	1.29	1.09	1.94		3.40	3.52	4.43		44.83	35.45	62.20		66.94	76.81	62.21	
D of F§	0	0	0		0	0	0		0	0	0		0	0	0	
	18	18	18		45	45	45		18	18	18		45	45	45	
F Ratio	0	0	0		0	0	0		0	0	0		0	0	0	
Grade 7 1 Site																
Mean	13.59	13.59	0	0	12.36	12.44	0.09	0.53	79.44	80.81	1.37	1.33	81.57	82.21	0.64	0.92
S. Dev	0.50	0.50	0.54		1.42	1.31	1.36		5.89	8.29	5.37		7.59	8.21	5.86	
N	27	27	27		70	70	70		27	27	27		70	70	70	
BMS†	0	0	0		0	0	0		0	0	0		0	0	0	
WMS‡	0.25	0.25	0.31		2.03	1.73	1.85		34.64	68.70	28.86		57.58	67.48	34.38	
D of F§	0	0	0		0	0	0		0	0	0		0	0	0	
	26	26	26		69	69	69		26	26	26		69	69	69	
F Ratio	0	0	0		0	0	0		0	0	0		0	0	0	

* $p \leq 0.05$

† BMS = Between Mean Square.

‡ WMS = Within Mean Square.

§ D of F = Numerator Degrees of Freedom
Denominator Degrees of Freedom.

Table 31

RESULTS OF COOPERSMITH SELF-ESTEEM INVENTORY
FOR SELECTED AND TOTAL DATA SETS FOR IRIT AND R-3

	Selected Children Total Coopersmith Truth				All Children Total Coopersmith Truth				Selected Children Total Coopersmith				All Children Total Coopersmith			
	Fall	Spring	Diff.	t Test for Fall-Spring Differences	Fall	Spring	Diff.	t Test for Fall-Spring Differences	Fall	Spring	Diff.	t Test for Fall-Spring Differences	Fall	Spring	Diff.	t Test for Fall-Spring Differences
IRIT																
Grade 3																
3 Sites																
Mean	11.95	12.75	0.80	3.39*	10.63	11.02	0.40	1.74	82.50	82.30	-0.20	-0.14	83.11	82.83	-0.49	-0.60
S. Dev	0.94	0.85	1.06		1.52	1.64	1.81		7.69	7.52	6.41		6.85	7.36	6.51	
N	20	20	20		64	65	63		20	20	20		64	65	63	
BMS[†]	0.67	0.74	1.71		2.43	2.18	0.12		256.28	164.96	35.91		37.16	30.32	13.90	
WMS[‡]	0.92	0.72	1.05		2.30	2.72	3.38		35.91	43.78	41.73		47.18	54.98	43.33	
D of F[§]	2	2	2		2	2	2		2	2	2		2	2	2	
	17	17	17		61	62	60		17	17	17		61	62	60	
F Ratio	0.73	1.02	1.64		1.06	0.80	0.04		7.14	3.77	0.86		0.79	0.55	0.32	
Grade 4																
3 Sites																
Mean	12.00	12.53	0.53	2.04	10.68	11.29	0.55	2.13*	82.12	83.94	1.82	0.90	83.14	84.29	1.35	1.13
S. Dev	0.79	0.62	1.07		1.46	1.44	1.82		6.40	10.35	8.32		6.52	8.96	8.36	
N	17	17	17		50	49	49		17	17	17		50	49	49	
BMS[†]	1.37	0.06	1.26		3.06	0.93	5.82		63.37	201.47	54.12		144.54	102.05	7.69	
WMS[‡]	0.52	0.44	1.12		2.10	2.13	3.18		37.79	93.71	71.30		38.23	79.30	72.52	
D of F[§]	2	2	2		2	2	2		2	2	2					
	14	14	14		47	46	46		14	14	14					
F Ratio	2.65	0.14	1.12		1.46	0.44	1.83		1.68	2.15	0.76		3.78	1.29	0.11	
R-3																
Grade 7																
4 Sites																
Mean	13.44	13.42	-0.03	-0.34	12.11	12.28	0.18	1.43	82.67	83.29	0.63	0.79	83.58	84.57	1.03	2.08*
S. Dev	0.50	0.50	0.69		1.69	1.60	1.69		8.62	7.58	6.69		8.49	7.81	6.79	
N	72	72	72		189	191	188		72	72	72		189	191	188	
BMS[†]	0.10	0.48	0.97		10.97	9.61	16.29		73.89	63.53	2.23		31.46	58.76	26.54	
WMS[‡]	0.26	0.24	0.46		2.73	2.44	2.63		74.27	57.24	46.65		72.76	60.98	46.49	
D of F[§]	3	3	3		3	3	3		3	3	3		3	3	3	
	68	68	68		185	187	184		68	68	68		185	187	184	
F Ratio	0.39	2.04	2.13		4.01	3.94	6.19		0.99	1.11	0.05		0.43	0.96	0.57	

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[*] $p \leq 0.05$.

[†] BMS = Between Mean Square.

[‡] WMS = Within Mean Square.

[§] D of F = Numerator Degrees of Freedom
Denominator Degrees of Freedom.

toward self, peers, parents, and school, and the other, a "truth scale," assesses the reliability of the responses to the first type. Under "Selected Children" on Tables 28 through 31, the results are presented for children whose responses are judged to be reliable. For the Faces test, all children who did not answer the "truth scale" items correctly, either fall or spring, were eliminated. For the Coopersmith, all children who did not achieve the mean on these items at their PIP and grade for either fall or spring were eliminated. These deletions were made on the presumption that children who achieved low scores either did not understand the instructions or were not answering with the degree of openness required to produce reliable scores.

For both "All Children" and "Selected Children," F tests were applied to the fall-spring difference as well as to assess the homogeneity of sites in fall and in spring.

As can be seen in Table 28 for "All Children," there has been little change from fall to spring for either the "truth scale" scores or scores for the total Faces Inventory. Except for PTR, there are only marginal differences among projects within a PIP. For "Selected Children," little change appears to have occurred either, even though the cases that might be classified as less reliable have been removed.

For PTR the growth is statistically significant in positive attitude among the selected children. The value of the statistic for site differences is approximately 1, indicating that this positive change is descriptive of both PTR sites.

Tables 29 through 31 display the results for the Coopersmith Self-Esteem Inventory. There is an almost uniform increase in means from fall to spring for both data sets--"All" and "Selected."

For "All Students," positive growth may be noted in nine of 11 PIP-grade combinations. For one there is no change, and there is slight regression at grade 3 IRIT. Selected children generally show slightly higher fall-spring attitude gains. However, they are for the most part still not significant at the 0.05 level.

We conclude that there is no statistically significant evidence that PIP projects have detrimental effects on the attitudes of children toward self, peers, parents, or school. In fact, t-tests performed on fall and spring scores indicate growth from fall to spring and no support for negative effects. Overall, the attitude test results, especially for fall-spring gains, were quite homogeneous within PIP and grade.

PIP-Specific Student Attitude Questionnaires

The general attitude inventories can indicate whether children's self-concept and their attitudes toward school and peers are growing or suffering. But since the PIP projects involve unique instructional programs and (except for R-3) involve students being identified and selected out of the group to participate in a special treatment outside the regular classroom, a measure of student reactions to these aspects of the projects is an important part of the assessment of student outcome.

The responses of first and second graders on questions like: "How do you feel about leaving the regular classroom?," and "How do other boys and girls feel about not being in the program?" reveal that most project students feel positive about their participation in Catch-Up, Conquest or PTR.*

In response to the question "How do you feel about being in _____?," the positive response rate was at least 70% or above except at the Catch-Up 3 and PTR 1 projects where the responses were somewhat evenly divided among positive, neutral, and negative response categories.

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*Catch-Up, Conquest, and PTR projects are the only ones that include first and second graders. The PIP-specific attitude questionnaires that followed the Faces Attitude Inventory format were used with these young children.

Responses to the question "How do you feel about leaving the regular classroom?" were generally positive or neutral, indicating that not much stigma was attached to participation in the programs. The Catch-Up 2 and PTR 1 projects had more negative responses, indicating that quite a few children were reluctant to leave their regular classroom for project participation for some reason.

The response pattern for the question "How do other boys and girls feel about not being in _____?" is also favorable toward the programs. About half of the respondents felt that other students were unhappy about not being in the program at their school. Exceptions to this pattern occurred at Catch-Up 5, Conquest 3, and PTR 2. The majority of responses at Catch-Up 5 indicated a neutral feeling by nonproject students. This can be expected because the majority of the student body at the Catch-Up 5 site are PIP students, and therefore the students view the program as a normal part of the curriculum.

In order to determine how the children thought their parents felt, and also to get an indirect assessment of parental attitudes toward their childrens' participation in a special program, the children were asked "How do your parents feel about _____?". The majority of students thought that their parents had a favorable opinion of their participation, as can be seen in Table 32. The equal division between a positive attitude and a neutral attitude reflected by the responses in Catch-Up 5 is most likely for the same reasons as those given for why PIP students have no special attitude toward being selected for the program--that is, almost everyone is a program participant.

Evaluation of special program features was also assessed by the Student Attitude Questionnaires. Catch-Up students were asked how they

Table 32

PERCENTAGE OF STUDENTS JUDGING PARENTAL ATTITUDES TOWARD THEIR CHILD'S PARTICIPATION IN PIP PROJECT--FIRST AND SECOND GRADES

Project	Percent with Positive Attitude	Percent Neutral	Percent with Negative Attitude
Catch-Up 1	80%	8%	12%
Catch-Up 2	88	13	0
Catch-Up 3	78	0	22
Catch-Up 5	40	40	20
Conquest 1	60	7	33
Conquest 2	86	9	5
Conquest 3	69	18	13
PTR 1	53	13	34
PTR 2	68	9	23

liked working with lab materials versus regular classroom materials. The responses were very favorable ranging from 75% in favor of the PIP materials at Catch-Up 2 to 100% at Catch-Up 5. Conquest students were asked how they like a place of their own to work in; the questionnaire showed a picture of the carrels in the Conquest lab. The responses were also favorable toward the program ranging from 76% at Conquest 3 to 87% at Conquest 1.

Third through seventh grade students were asked how they felt about being in the special program, about parental attitudes toward their participation, and about unique program features. The Coopersmith-type format was employed. In response to a question about how they felt about being in the project, the majority of responses were favorable (69% on the average). There were exceptions at Catch-Up 4 (46%), Conquest 3 (55%), and HIT 2 (53%).

Responses to the question concerning leaving the regular classroom for project activities indicate that an average of 62% of the students did not feel negative about this aspect of Catch-Up, Conquest, and IRIT.*

The response pattern for the question concerning the desire of non-PIP students to be in a PIP program shows an average response rate of 72% in favor of program participation. Marked exceptions occurred at Conquest 3 (44%) and HIT 2 (46%), indicating that the majority do not view the special program as desirable in those sites.

Parents' attitudes toward their children's participation in a PIP program was favorable, as reflected in Table 33.

Table 34 indicates that over 75% of the respondents had a favorable opinion of special features within their PIP, the only exception being the Conquest 3 project. Catch-Up students were asked about lab materials, Conquest students about working in the lab, HIT students about earning rewards, and R-3 students about the use of contracts.

With relatively few exceptions, responses to the Student Attitude Questionnaires reveal a positive feeling by most project students toward the program in which they are participating. These results correspond well to our own formal and informal observations at most project sites. The exceptions noted, e.g., Catch-Up 5, Conquest 3, and HIT 2, reflect local situations that are consistent with the findings.

Local Evaluation Results

Besides the attitude questionnaire results and our own observations, testimonials from individual projects indicate a great many positive

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*R-3 students were not asked the two abovementioned questions because of the nature of the program. All students at a particular grade level participate in the R-3 program.

Table 33

PERCENTAGE OF STUDENTS JUDGING PARENTAL ATTITUDES TOWARD THEIR CHILD'S PARTICIPATION IN PIP PROJECT--THIRD THROUGH SEVENTH GRADES

Project	Percent with Positive Attitude	Percent with Negative Attitude
Catch-Up 1	84%	16%
Catch-Up 2	83	17
Catch-Up 3	72	28
Catch-Up 4	57	43
Catch-Up 5	65	35
Conquest 1	83	17
Conquest 2	84	16
Conquest 3	74	26
HIT 1	87	13
HIT 2	78	22
IRIT 1	91	9
IRIT 2	90	10
IRIT 3	93	7
R-3 (1)	86	14
R-3 (2)	92	8
R-3 (3)	90	10
R-3 (4)	80	20

Table 34

STUDENT ATTITUDES TOWARD SPECIAL PIP CHARACTERISTICS

Project	Percent with Positive Attitude	Percent with Negative Attitude
Catch-Up 1	82%	18%
Catch-Up 2	87	13
Catch-Up 3	93	7
Catch-Up 4	77	23
Catch-Up 5	77	23
Conquest 1	76	24
Conquest 2	79	21
Conquest 3	63	37
HIT 1	100	0
HIT 2	87	13
R-3 (1)	78	22
R-3 (2)	84	16
R-3 (3)	83	17
R-3 (4)	76	24

changes in the attitudes of participants. A few examples provide a picture of the majority of projects.

The application for renewal of the PIP grant for Catch-Up 1 included the following comment from the school psychologist: "I have been impressed and highly pleased with the significant gains in acquisition of basic reading and math skills which these children have demonstrated... and the marked change in positive attitudes toward school and learning in general."

One teacher at that site reported that "in each and every case these children involved have shown tremendous improvement in their reading skills and in their math skills; but most especially in reading. I attribute their progress to the marvelous change in attitude that each child has shown."

A parent with a child in IRIT 1 commented on the confidence her child had gained from really learning how to read, observing that she improved in other skill areas such as mathematics as well. A teacher at this site "observed improvement in the students' self-esteem and self confidence level, peer relationships and motivation to learn."

The Conquest 3 project received comments from teachers and parents concerning individual students, all of whom had greatly improved in reading skills, motivation, and self-confidence, and who were working and reading better in their homes with less frustration.

The reactions of the staff to the projects are discussed in the following section. It is sufficient to conclude here that the project staff in the majority of sites felt that there was considerable improvement in student independence, self-esteem, and enthusiasm for learning.

Impacts of PIP Projects on Staff

A primary concern during the PIP implementation period was impacts on local school and district staff. Of primary interest were staff attitudes and opinions regarding the packaged materials, and the projects that were established with their aid. In addition, there was interest in the attitudes toward government financial support and toward other kinds of assistance provided. Data were collected from teachers and aides who make up the instructional staff of the projects (project staff), from teachers and aides with students in the project (nonproject staff), and from administrators at the school and district levels.*

In the PIP field test, the original decision to participate (i.e., to "adopt" one of the packaged programs and place it in one or more schools) was made by district administrators. Nevertheless, attitudes that project teachers and other school instructional staff hold toward the programs remain a powerful influence on the implementation of the projects in the actual instructional setting. In previous educational studies, it has frequently been pointed out that innovations "adopted" at the district level have generally not taken hold in schools where the innovative materials were packaged, and where teachers have failed to become committed and to support them (e.g., the Rand Change Agent study). Where the teachers either lack a thorough understanding of the methods and materials involved or maintain serious doubts regarding the innovation's merits or appropriateness to their own setting, the changes of successful installation appear slim indeed. Probably even smaller is the likelihood that use of new methods and materials would continue, once special incentives and outside monitoring were withdrawn.

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*Frequency data from both ISQ and ASQ are presented in Appendices A and B in formats selected for their potential interest. Appendix C describes the manner in which variables were formed on ISQ data for this section of the report.

The PIP concept recognizes the necessity of staff who understand project operations and who maintain supportive attitudes toward the projects. Although some specific aspects vary across packages, the guidelines are generally very similar. For project instructional staff, the following desired impacts are described:

- Understanding of and commitment to the philosophy, goals, and methods involved.
- Expectation and recognition of success in participating children.
- Understanding of their own role in the project and confidence in their own ability to implement the instructional aspects of the project in the lab or classroom.
- Respect for other members of the project staff.
- Supportive attitude toward nonproject staff; interest in cooperating and sharing information with nonproject staff.

For nonproject staff the list of desired impacts is similar, with the emphasis on:

- Understanding and acceptance of project philosophy, goals, and methods.
- Recognition of success in participating children, based both on reports from project teachers and from observation in their own classes.
- Respect for the project staff.

These desired impacts were considered critical to success by project directors and other personnel at the exemplary program sites. An additional factor not generally present at these original sites must be taken into account when examining the acceptability of the projects to staff at the field-test sites. The original project directors and teachers worked together, usually over a period of years, to develop a program within their own schools. The program was designed in response to perceived local needs and in the context of a particular organizational in installing the projects in the local settings; and perceived impacts of the projects--both positive and negative. The data are primarily from the ISQ; interviews and discussions with staff members on the sites supplement the questionnaire data.

Acceptability of the Projects

Specific questions on the ISQ were related to project acceptability. They dealt with such issues as assessment of the project's merit, professional feelings about the project, the extent to which the respondent supported the project and would recommend it to colleagues and parents whose children needed special help, and (for project instructional staff only) interest in continued use of recommended methods and materials.

Responses to these questions were generally highly favorable, suggesting that the packaged programs as implemented at the 19 sites were well received by project and nonproject staff alike. For example, 75% of the project teachers and aides and 53% of the nonproject instructors indicated that they would support the local project "very much" if asked about its merit, while less than 5% of the total sample indicated little or no support. Very high levels of acceptability were indicated on questions that asked respondents if they would recommend the local project to others. Of the project teaching staff, 95% reported that they would recommend their PIPs to colleagues in other schools or districts; 84% of the nonproject staff indicated that they would recommend their PIPs to colleagues. Nearly all respondents reported that they would recommend the project to parents (96% of the project teaching staff and 91% of the nonproject staff). Both project and nonproject instructors were asked about their interest in being part of the project's instructional staff during the following year. Nearly 90% of the project staff responded positively; slightly more than half of the nonproject staff also indicated some interest in becoming part of the PIP staff.

Another aspect of project acceptability is the extent to which participants desire to modify the projects. This issue is of particular concern in the present study, since one of the major objectives of the PIP field test was to explore the extent to which local practitioners were able (and willing) to implement the packaged guidelines without modification. On the questionnaire, somewhat more than half of the project instructional staff reported an interest in seeing some changes made to instructional methods and materials; less than 5%, however, indicated a preference for making major changes or abandoning the specified methods and materials altogether. Approximately one-third of the project teaching staff offered recommendations for improving curriculum materials. Suggestions were varied; the most numerous concerned changes to reading materials (more variety, concentration on specific skills, etc.), improvement in materials for particular grade levels, and better coordination of materials used in project laboratories with the regular curriculum. Almost 20% noted a need for improving or simplifying the tests used to select students for the projects. The most frequent recommendations related to instructional methods that required grouping children according to ability level and training staff prior to the start of school. Nonproject teachers and aides generally suggested few, if any, improvements. Their comments were focussed mainly on selection of students, with the emphasis on using recommendations of classroom teachers and including more children in the projects.

Interview data revealed similar interests. Project staff considered some materials outdated or inappropriate to the ability levels of the students. Fortunately, this problem was not often mentioned at PTR and HIT sites, since each of these programs relies heavily on a limited set of materials. The other four packages recommended a fairly wide variety of materials, leaving teachers with some latitude to use the ones they found most appropriate to the needs of their students.

The types of modifications to the PIP instructional programs suggested by local project staff reflect an interest in making the programs more efficient and ultimately more effective. A number of staff members at Conquest sites, for example, found the 17-step diagnostic testing procedure unnecessarily cumbersome and raised objections to particular instruments in the battery. Since such objections appear to stem from an interest in improving the program, rather than in rejecting it, they do not reflect unfavorably on the acceptability of the Conquest program. They do reflect the discomfort that local staff expressed throughout the year with the fact that PIP specifications were flexible or inflexible on a seemingly arbitrary basis.

Probably the most serious doubts about the appropriateness of program specifications were related to the use of nonprofessional staff in instructional roles. At least a few nonproject staff appeared to question the ability of aides and adult or student tutors to teach basic skills, particularly to children who had displayed difficulties in these areas. (Project staff who had more exposure to the instructional programs in operation did not raise the objection.) This problem has potentially serious implications for HIT and PTR, since use of relatively large numbers of nonprofessional tutors is a fundamental component of both programs. Improved orientation for nonproject, sending teachers, supplemented by continued communication and evidence of improvement in student achievement, might help to alleviate this problem.

Mean scores on the ISQ variables included in the acceptability dimension are displayed in Table 35. In addition to the grand mean derived for each variable, mean scores are given for project and nonproject staff separately and for staff associated with each of the six programs. Significance levels displayed in the table were obtained from a two-way analysis of variance (project versus nonproject and PIP-by-PIP) conducted

Table 35

PROJECT ACCEPTABILITY: OVERALL OPINIONS

Respondent Group	Variable: Respondent Assessment Range = 1 (Neg) to 5 (Pos)		Respondent Affect Range = 1 (Neg) to 5 (Pos)		Project Relevance Range = 1 (Pos) to 5 (Neg)		Continue Methods and Materials Range = 1 (Pos) to 4 (Neg)		Support Project Range = 1 (Pos) to 5 (Neg)		Recommend to Colleagues Range = 1 (Pos) to 5 (Neg)		Recommend to Parents Range = 1 (Pos) to 5 (Neg)		Mean Rank
	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	
Catch-Up	4.68	1	4.64	2	1.66	3	1.52	2	1.31	2	1.40	2	1.19	1	1.86
Conquest	4.54	3	4.31	5	1.72	5	2.00	6	1.62	5	1.67	5	1.33	4	4.71
HIT	4.35	5	4.42	4	1.66	4	1.79	5	1.56	4	1.48	3	1.29	3	4.00
IRIT	4.52	4	4.47	3	1.59	2	1.67	4	1.51	3	1.53	4	1.37	5	3.57
PTR	4.65	2	4.70	1	1.55	1	1.17	1	1.19	1	1.31	1	1.14	2	1.29
R-3	4.25	6	4.11	6	1.88	6	1.60	3	1.77	6	1.80	6	1.53	6	5.57
$p \leq$	0.01		0.01		0.20		0.01		0.01		0.01		0.01		
Project	4.58		4.50		1.67		1.65		1.31		1.38		1.21		
Nonproject	4.41		4.32		1.73		--		1.69		1.71		1.41		
$p \leq$	0.01		0.01		0.15		--		0.01		0.01		0.01		
All	4.49		4.40		1.70		1.65		1.52		1.56		1.33		

on each variable. To facilitate across-PIP comparisons, mean scores on each variable have been rank ordered.[*]

By way of example, for the first variable, labelled "Respondent Assessment," the ISQ items that make up this variable dealt with the respondent's professional judgment of the project as a method of teaching. Respondents were asked to characterize the projects on several Likert-type scales (discouraging to promising; ineffective to effective, and the like). Mean scores on the variable could range from 1 to 5, with 5 being the most positive. The overall mean of 4.49 indicates a very positive assessment of the projects and reflects favorably on their acceptability. Relatively small but highly reliable differences appear for the subgroups examined. Project staff expressed more positive opinions than nonproject staff. The across-PIP comparison indicates that staff of Catch-Up and PTR projects were most positive, while those at HIT and R-3 sites were least positive.

The second variable on Table 35 labelled "Respondent Affect," is based on a somewhat different aspect of respondent opinions about the projects.[†] Again Likert-type scales were used, with respondents characterizing their professional feelings about the projects (opposed to supportive, dissatisfied to satisfied, and the like). Again, the responses were highly favorable, with small but reliable differences between project and nonproject staff and across PIPs.

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[*] Scales for some individual items on the questionnaire were reversed during analysis, so that all items within a single variable were scaled in the same direction. Variables themselves are not always scaled in the same direction. For some, a mean score of 1 is positive; for others, a mean score of 1 is negative. Where mean scores on the variables are in rank order, a rank of "1" always indicates the most positive score and a rank of "6" the least positive.

[†] A factor analysis validated the grouping of these items into a separate variable.

framework.* By contrast, personnel at the field-test sites were not asked to design a program suitable to their needs and their context. Rather, they were asked to replicate a program developed elsewhere.

As noted elsewhere in this report, previous attempts at diffusion and replication of educational programs have frequently been judged unsuccessful. Criticism of packaging efforts has been particularly strong. (See for example Turnbull et al., 1974 and Pincus 1974). It has been suggested that part of the problem is that potential adopters tend to doubt that any nontrivial educational program developed outside their immediate setting can be introduced into this setting without considerable adjustment and adaptation. Thus, packaged programs, unless supplemented with generous amounts of technical assistance to allow this adjustment, are not likely to be well received by those who are expected to implement them.

Throughout the PIP field test, USOE discouraged both reliance on technical assistance and deviation from the schedules, procedures, and materials prescribed in the packages. It would appear, then, that the notion of acceptability is especially important and complex in the current study. In addition to supporting the goals and methods of the projects, staff must be willing to put into practice a series of specifications developed by other educators and packaged with no knowledge of the context and organizational framework of the adopting district. In this section, we focus on the attitudes of instructional staff--both project and nonproject teachers and aides. This section describes results of the PIP field test on staff attitudes toward the projects and the packages in which program guidelines were described; staff opinions regarding the relevance of these programs to local needs; difficulties encountered

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*PTR can be considered an exception since the tutoring kits were first developed at the University of Indiana.

The remaining variables in the table represent other indicators of project acceptability. In most cases, strikingly similar patterns emerge; the overall means reflect a high degree of acceptability, with fairly small but reliable differences between project and nonproject staff and across packages. Some differences appear in rank order. To facilitate across-PIP comparisons, mean ranks for each package are displayed in the last column. These ranks suggest that PTR was the most favorably received, followed by Catch-Up. IRIT, HIT, and Conquest occupy the middle range. Least accepted was R-3.

In the remainder of this section, we discuss dimensions reflecting staff perceptions of various impacts on the projects and suggest some possible explanation for variations in acceptance generated by the projects.

Staff Perceptions of Impacts on Project Pupils

One important component of project acceptability is the project's apparent effectiveness. Impacts on children are generally considered the ultimate test of project effectiveness. Projects that appear to produce achievement gains, increased motivation, or desirable changes in the behaviors of participating students are naturally more acceptable to educators than projects that seem to result in negative impacts on students or no perceptible changes at all. The student attitude inventories administered in April and discussed in the previous section of this chapter did not influence the staff perceptions described here. The results reported here were based on ISQ data and interview data obtained in February. Presumably, these opinions are based on direct contact with students in the classroom or reports from other staff who come into contact with the students.

The evidence from interview and questionnaire data suggests the many staff members perceived benefits to students. Four ISQ variables related to positive impacts on project students are displayed in Table 36. The first three variables describe the proportion of participating children perceived by respondents as showing satisfactory improvement in academic skills, motivation (self-confidence, motivation to learn, attendance), and behavior (relationships with staff and other students, behavior inside and outside the classroom). These three subscales are combined in the fourth variable. The mean scores indicate that on the average, respondents reported improvement in academic skills and motivation from somewhat more than half of their students, and improvement in behavior from slightly less than half. Again, PIP staff expressed somewhat more positive views than did non-PIP staff. Reliable differences across PIPs were found for the overall variable and for the motivation and behavior variables, with PTR respondents reporting positive changes on the largest proportion of students, and R-3 and Conquest reporting positive changes on the least proportion.

The volume of nonresponse to specific items in these variables was occasionally fairly large--up to 50%. This was particularly true for the academic skills, since not all teachers and aides surveyed were familiar with student progress in multiple subjects.

When asked to comment in the ISQ on positive impacts of the projects, a substantial majority of respondents cited benefits to students. The two most frequent types of comments dealt with improvement in academic skills and attitudes toward school; other benefits mentioned fairly often were related to improved staff awareness of individual needs and provision of new opportunities for participating students.

While many staff recognized the danger of prematurely drawing firm conclusions, there were indications during the February interviews that both project and nonproject staff already perceived benefits to at least some participating children. In general, it appeared that staff

Table 36

PERCEIVED POSITIVE IMPACTS ON STUDENTS

Respondent Group	Academic Impacts Range = 1 (Pos) to 5 (Neg)		Motivation Range = 1 (Pos) to 5 (Neg)		Behavior Range = 1 (Pos) to 5 (Neg)		Positive Impacts Range = 1 (Pos) to 5 (Neg)	
	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
Catch-Up	2.63	2	2.35	3	3.17	4	2.56	4
Conquest	2.91	6	2.72	5	3.41	6	2.75	5
HIT	2.69	3	2.53	4	2.95	2	2.44	2
IRIT	2.74	4	2.34	2	3.16	3	2.48	3
PTR	2.49	1	1.93	1	2.75	1	2.04	1
R-3	2.87	5	2.84	6	3.31	5	2.78	6
$p \leq$	NS*		0.01		0.01		0.01	
Project	2.54		2.42		3.03		2.35	
Nonproject	2.83		2.57		3.29		2.73	
$p \leq$	0.05		0.05		0.01		0.01	
All	2.73		2.50		3.16		2.55	

*NS = not significant (significance level is <0.1) felt that the PIP projects represented useful approaches to serving the needs of some, if not all, children who had been targeted for special help.

Five of the six PIP programs call for identifying children as requiring special help and then removing them from their classrooms in order to receive instruction. Indications that local staff see these requirements or other project features as producing negative impacts on pupils must be recognized as detracting from the perceived value, and hence the acceptability, of the programs.

ISQ data suggest that serious negative impacts have not been detected. Two variables related to negative impacts on pupils are displayed in Table 37. These two variables were created on the basis of a factor analysis of items dealing with positive and negative impacts that the projects might produce. The first, labelled "Negative Impacts on Pupils," includes three items dealing with appropriateness of the projects to student needs, compatibility of instructional materials with the regular curriculum, and adequacy of time for project instruction.

The second variable includes several types of disruption that might result from installing the projects in the schools, creating a negative impact on participating students (disruption of classroom schedules, absence from the classroom during critical activities, extra assignments to children who are removed from the classroom, and other disadvantages).

On both variables, possible scores range from 1 (high level of perceived negative impacts) to 5 (few, if any, negative impacts). Inspection of the mean scores in Table 37 suggests that teaching staff did not generally report serious negative consequences to pupils participating in the program, although nonproject staff indicated a somewhat higher level of disruption. Differences across packages, although not large in magnitude, were statistically significant, with R-3 seen as producing the fewest negative impacts, and Conquest and HIT the most. It is of

Table 37

PERCEIVED NEGATIVE IMPACTS ON STUDENTS

Respondent Group	Negative Impacts Range=1(Neg) To 5(Pos)		Disruptions Range=1(Neg) To 5(Pos)		Mean Rank
	Mean	Rank	Mean	Rank	
Catch-Up	3.98	3	4.04	3	3
Conquest	3.96	4	3.84	6	5
HIT	3.49	6	4.00	5	5.5
IRIT	4.35	1	4.01	4	2.5
PTR	3.96	5	4.15	2	3.5
R-3	3.98	2	4.30	1	1.5
p≤	0.01		0.05		
Project	3.95		4.17		
Nonproject	3.95		3.96		
p≤	NS		0.05		
All	3.95		4.06		

NS = Not significant (significance level is > 0.1).

interest that of the six programs, R-3 is the only one that does not require targeting individual students for participation and removing them from the regular classroom setting for instruction.

Impacts on Project Teachers and Aides

We created two dimensions from ISQ data to determine perceived impacts of the projects on teaching staff. One kind includes variables dealing with training, and the other includes variables on more general impacts.

Data included in the training dimension were collected from project teachers and aides only. The first variable displayed in Table 38 reflects the extent of training reported in 13 areas for which training

Table 38

TRAINING RECEIVED BY PROJECT STAFF

Respondent Group	Extent of Training Range = 1 (Great Deal) to 3 (None)		Adequacy of Training Range = 1 (Very) to 3 (Not at All)		Relevance of Training Range = 1 (Very) to 3 (Not at All)	
	Mean	Rank	Mean	Rank	Mean	Rank
Catch-Up	2.25	4	1.72	5	1.59	5
Conquest	2.00	3	1.58	3	1.40	4
HIT	1.98	2	1.64	4	1.39	3
IRIT	2.52	6	1.27	1	1.13	1
PTR	1.54	1	1.27	2	1.14	2
R-3	2.27	5	1.94	6	1.69	6
p≤	0.01		0.01		0.01	
All	2.90		1.67		1.48	

was specified in one or more of the PIPs. For each area listed, more than half of the respondents reported at least some training. Training was most frequently reported in the following areas:

Use of specific curriculum materials - 90%
Use of special equipment - 78%
Use of gaming and simulation techniques - 76%
Strategies for instruction in basic skill areas - 74%

Training was least often cited in the following areas:

Arrangement of the instructional environment - 60%
Maintaining discipline and control in the classroom - 58%
Involvement of parents in the education of their children - 54%

Comparison of mean scores obtained by staff in each PIP reveals that PTR instructors reported the most training, and IRIT instructors reported the least.*

The other training variables reflect adequacy and relevance of the training. Of those who reported receiving training in any given area, between 44% and 78% indicated that additional training was needed or would be helpful. The types of training judged by respondents as most adequate and relevant to their work in the classroom were: using special equipment, working with small groups of children, and working with children individually. Those in which most improvement was considered necessary were gaming and simulation techniques and involvement of parents. This corresponds well with our site visit data indicating that the R-3 teachers, who were supposed to incorporate gaming and simulation techniques into the curriculum, understood their PIP instructional program least well. The findings on parent involvement are also in line with our observations and interviews.

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*The score obtained on this variable reflects both the number of areas in which training was reported and the amount of training indicated for each area.

Inspection of data in Table 38 shows that IRIT and PTR staff assigned the highest overall ratings to the training they had received, while Catch-Up and R-3 staff gave the lowest ratings in terms of training adequacy and relevance. On the average, however, staff using all six packages rated training as fairly relevant to their needs.

The two variables displayed in Table 39 were derived from a factor analysis. The first, "Positive Impacts on Project Staff," includes four items citing direct benefits to project staff (exposure to effective instructional techniques and strategies, increased awareness of student needs, improvement in classroom management skills, and increased effectiveness as teachers). The fifth item in this variable, increased parent involvement, was negatively related to the others, suggesting that local

Table 39

POSITIVE IMPACTS ON PROJECT STAFF

Respondent Group	Positive Impacts Project Staff Range = 1 (Pos) to 5 (Neg)		Project/Nonproject Cooperation Range = 1 (Pos) to 5 (Neg)	
	Mean	Rank	Mean	Rank
Catch-Up	1.99	2	2.12	2
Conquest	2.15	3	2.35	4
HIT	2.20	4	2.33	3
IRIT	2.21	5	2.46	5
PTR	1.89	1	1.71	1
R-3	2.27	6	2.77	6
$p \leq$	0.01		0.01	
Project	2.05		2.16	
Nonproject	2.20		2.46	
$p \leq$	0.02		0.01	
All	2.12		2.33	

staff have not tended to view parent involvement as benefitting project instructional personnel. Mean scores on this variable indicate general agreement that the types of staff benefits mentioned above had been realized during the first year of the field test. Project staff reported a significantly higher level of agreement that these benefits had been obtained than did nonproject staff; differences across packages were not significant.

The second variable, "Project/Nonproject Staff Cooperation," includes three items related to sharing of information and general cooperation between project and sending teachers. The overall mean reflects a moderate tendency toward agreement that cooperative relationships between project and nonproject staff have been established; again, responses from project staff are significantly more positive than those from nonproject staff.

The rank order of PIPs on this variable is almost identical to the rank order on the positive impacts variable; however, in this case, statistically significant differences were obtained. PTR and Catch-Up staff reported the highest level of cooperation. That IRIT and R-3 ranked lowest on cooperation is not surprising, given certain features of the programs. IRIT is the only package requiring interschool communication between project teachers and sending teachers. The sending teachers in IRIT are typically located in several schools. At two of this year's sites, the IRIT center was located in a facility separate from all participating schools. R-3, while confined to a single school at each site, is the only package in which the program replaces rather than supplements regular instruction. As a result, nonproject staff generally provide instruction in areas not included within the R-3 curriculum, e.g., languages, physical education, and home economics. In the other PIP projects, reading (and sometimes math) instruction is provided by sending teachers as well as by project staff, and the two groups may share more mutual interests.

In answer to a question on the most positive impact of the projects, nonproject teachers and aides most frequently cited increased awareness of the needs of individual students. Project staff cited this impact as well as improvement in their own instructional skills.

Impacts on Nonproject Staff

ISQ variables related to impacts on nonproject staff have been grouped into two dimensions: positive and negative impacts. Within the first dimension are three variables, labelled "Current Reactions of Staff," "Project/Nonproject Staff Cooperation," and "Nonproject Staff Interest."

Mean scores on the first variable displayed in Table 40 indicate a moderate tendency for respondents to report that staff attitudes toward

Table 40

POSITIVE IMPACTS ON NONPROJECT STAFF

Respondent Group	Current Reactions of Staff Range = 1 (More Pos) to 3 (More Neg)		Project/Nonproject Staff Cooperation Range = 1 (Pos) to 5 (Neg)		Nonproject Staff Interest Range = 1 (Pos) to 5 (Neg)	
	Mean	Rank	Mean	Rank	Mean	Rank
Catch-Up	1.50	2	2.12	2	1.83	3
Conquest	1.59	4	2.35	4	1.74	2
HIT	1.56	3	2.33	3	2.80	6
IRIT	1.68	6	2.46	5	1.69	1
PTR	1.49	1	1.71	1	2.21	4
R-3	1.61	5	2.77	6	2.22	5
p≤	NS*		0.01		0.01	
Project	1.54		2.16		2.19	
Nonproject	1.59		2.46		1.92	
p≤	NS*		0.01		0.05	
All	1.57		2.33		2.04	

*NS = not significant (significance level is <0.1) the project had improved over the year. Differences across packages and between project and nonproject staff were not significant. Results on the second variable, "Project/Nonproject Staff Cooperation," were described above as part of project staff impacts. The third variable represents perceived interest of nonproject teaching staff in adopting PIP materials and instructional strategies for use in their own classrooms. The overall mean for nonproject staff indicated that they would like to employ elements of the PIP projects in their own classrooms. They were more positive than project staff, with the greatest interest reported by teachers and aides sending children to IRIT, Conquest, and Catch-Up labs. The heavy reliance on use of paraprofessionals for one-to-one tutoring in HIT and PTR, and differences in subject matter taught by project and nonproject staff in R-3, undoubtedly make PIP-specified instructional methods and materials in these packages less amenable to use in nonproject classes.

Four variables related to negative impacts on nonproject staff are displayed in Table 41. The specific items used to construct these variables describe disruptions to regular school and classroom schedules that might result from installation of special projects--teachers' release of students from their classrooms, resources and special privileges possibly available to project teachers only, and the need for better communication between project and nonproject staff.

The first variable, "Disruptions," was discussed earlier in the section on pupil impacts. Respondents generally did not agree that the types of disruptions cited had actually been created, although nonproject staff were significantly less positive than project staff. The second and third variables reflect several features of special programs that might produce a negative reaction by nonproject staff. Differences between project and nonproject staff responses were not highly significant.

Table 41

NEGATIVE IMPACTS ON NONPROJECT STAFF

Respondent Group	Disruptions Range = 1 (Low) to 5 (High)		Negative Features--A Range = 0 (Low) to 1 (High)		Negative Features--B Range = 0 (Low) to 1 (High)		Improved Communications Needed Range = 1 (Agree) to 5 (Disagree)		Overall Mean Rank
	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	
Catch-Up	4.04	3	0.12	3	0.13	3	2.07	3	3.00
Conquest	3.84	6	0.17	4	0.11	1	1.97	4	3.75
HIT	4.00	5	0.20	5	0.20	4	1.86	5	4.75
IRIT	4.00	4	0.06	1	0.14	6	2.08	2	3.25
PTR	4.15	2	0.10	2	0.12	2	2.21	1	1.75
R-3	4.30	1	0.26	6	0.18	5	1.71	6	5.50
p≤	0.05		0.01		0.10		0.03		
Project	4.17		0.21		0.16		1.95		
Nonproject	3.96		0.13		0.14		1.97		
p≤	0.05		0.08		NS*		NS*		
All	4.06		0.16		0.15		1.96		

*NS = not significant (significance level is <0.1).

Of the ten features listed, none were checked by more than one-third of the respondents. The five cited most frequently by project and nonproject staff were:

Project Feature	Percentage of Project Staff	Percentage of Nonproject Staff
Removing students for instruction	19%	19%
Frequent changes in schedules	24	19
Smaller classes for project staff	27	15
More classroom aides for project staff	32	16
Extra time to project staff for planning	29	16

Of these five, the three most often noted by project staff describe special resources available only to project staff. Nonproject teachers were more likely to cite disruptive aspects of the programs (schedule changes, removal of students from regular classes) as sources of resistance.

The final variable on this dimension, "Need for Improved Communication," reflects one of the most serious difficulties encountered during this first year of the PIP field test. The overall mean indicates general agreement that improved communication is needed; the difference between mean scores obtained by project and nonproject staff was not significant.

On a questionnaire item that asked respondents to describe the most serious problems encountered during the first project implementation year, 15% of the nonproject staff commented on the need for improved communication. This problem was also frequently cited during interviews with nonproject staff, sending teachers felt that they ought to be better informed and more involved with project staff. Nonproject teachers reported a particular interest in receiving information on the needs and progress of individual students, either through written reports prepared by project teachers or through informal conferences. Such information, they felt, might help them work more effectively with project children. Nonproject staff also wanted an opportunity to provide input to project staff, during both pupil selection and project operations. Many commented that they had been consulted little, if at all, by project teachers and that they had received few progress reports.

Project teachers and aides, on the other hand, appeared somewhat more immediately concerned about problems related to acquisition and use of specified materials. During interviews, project teachers typically acknowledged the importance of maintaining contact with nonproject staff but tended to note that during this first year, higher priority had been given to getting their programs under way. The importance of effective, frequent contact between project and nonproject staff is discussed in the PIPs; most of the responsibility for initiating contact and maintaining open lines of communication is assigned to the project director and the teachers. This area was somewhat neglected this year. While it is not surprising that project staff gave higher priority to installing their programs than to achieving liaison with nonproject staff, special attention to this area during the second year might help to minimize disruptions perceived by nonproject staff and make the programs both more acceptable and more effective.

To facilitate comparisons across PIPs on the dimension of negative impacts on nonproject staff, a mean rank was computed for each package. In general, negative impacts were cited least often by PTR staff and most frequently by personnel at R-3 and HIT sites.

Perceived Difficulty of Implementation

We created four variables from ISQ data to describe problems associated with implementing the six programs. A fifth variable represents respondent perceptions of the extent to which the local project resembled the packaged specifications.

The first variable displayed on Table 42 reflects the extent to which respondents reported that various aspects of the projects differed from standard procedures in their schools. The scale ranged from 1 (very different) to 5 (not at all different). The extent to which the programs required dramatic departures from regular school policies and procedures should be related to difficulties encountered during the installation phase. The overall mean score of 2.76 suggests that respondents felt that some program features represented fairly substantial changes over regular operations. Slightly over 20% of the nonproject group did not feel sufficiently familiar with their local projects to respond. The staff who did respond tended to describe the materials and equipment as the most distinctive features of the new programs. Project staff reported a significantly higher degree of difference than did nonproject staff. Differences were considered largest at R-3 sites and smallest at IRIT and PTR sites.

The second variable, labelled "Adaptation," describes the extent to which various aspects of the programs had to be modified in the local districts. Nonresponse was substantial. Somewhat more than one-fourth of the project staff did not feel qualified to respond, and PTR was the only program for which even a substantial minority of the nonproject personnel responded. On the average, little difference was noted in the degree of adaptation required for the various aspects of the programs (staffing, organization and management, curriculum, instructional techniques, student grouping patterns); the grand mean of 2.63 indicates that at least some modifications to PIP guidelines were generally perceived. Adaptation was reported lowest in IRIT and PTR, and highest in R-3 and HIT.

Table 42

DIFFICULTY OF IMPLEMENTATION· RESEMBLANCE TO GUIDELINES

Respondent Group	Difference from Standard Procedures Range = 1 (High) to 5 (Low)		Adaptation Range = 1 (None) to 5 (A Great Deal)		Difficulty of Adaptation Range = 1 (Not at All) to 5 (Very)		Disruption Range = 1 (High) to 5 (Low)		Combined Rank	Resemblance to Guidelines Range = 1 (High) to 5 (Low)	
	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank		Mean	Rank
Catch-Up	2.51	5	2.52	3	1.73	3	4.00	3	3.50	1.80	2
Conquest	2.72	4	2.67	4	2.50	6	3.84	6	5.00	2.81	6
HIT	2.84	3	3.20	6	2.00	4	3.00	5	4.50	2.21	4
IRIT	3.07	2	1.97	1	1.64	2	4.00	4	2.25	2.00	3
PTR	3.49	1	2.14	2	1.26	1	4.15	2	1.50	1.38	1
R-3	2.38	6	2.88	5	2.46	5	4.30	1	4.25	2.67	5
$p \leq$	0.01		0.05		0.05		0.05			0.01	
Project	2.57		2.55		2.06		4.17			2.24	
Nonproject	2.92		3.06		1.56		3.96			1.91	
$p \leq$	0.02		0.02		NS*		0.05			0.02	
All	2.76		2.63		1.98		4.06			2.20	

*NS = not significant (significance level is >0.1).

Closely related to the extent of adaptation is difficulty of adapting guidelines to fit local needs. Again, nonresponse was sizeable (for nonproject staff, better than 80%; for project staff somewhat above 25%). Overall, adaptation was not considered particularly difficult, although statistically significant differences across packages were obtained in an analysis of variance. Adaptation of PTR was reported as least difficult; greatest difficulty was encountered at Conquest and R-3 sites.

The fourth variable, "Disruptions," reflects problems resulting from the presence of the local projects. This variable has been discussed previously. An overall implementation difficulty rank was calculated for each package by taking the average of the ranks obtained for the four variables. This overall rank may be compared to a rank ordering of mean scores on another variable, labelled "Resemblance to Guidelines," which reflects respondent perception of the extent to which the project in his school resembled specifications in the package.* The PIP-by-PIP breakdown is shown below:

Program	Difficulty Rank	Resemblance Rank
Catch-Up	3	2
Conquest	6	6
HIT	5	4
IRIT	2	3
PTR	1	1
R-3	4	5

In both cases, the Catch-Up, IRIT, and PTR programs constitute the upper half of the rank ordering, with Conquest, HIT, and R-3 in the lower half. It was originally anticipated that PTR and HIT would probably be most easily implemented since the curriculum materials specify the instructional procedures and sequences. Late receipt of materials at both HIT sites may account for some of the difficulty reported. Berman and McLaughlin (1975) report that innovative programs are most difficult to implement in secondary schools, and hence, the general difficulties with scheduling classes and with handling junior high schools may account for additional problems. On the whole, staff who considered themselves qualified to respond tended to report a fairly high level of fidelity to package guidelines; less than 10% indicated major differences.

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*Again, substantial nonresponse was encountered--approximately 25% for project personnel and 90% for nonproject staff.

Additional ISQ data suggest that project and nonproject staff had somewhat different opinions regarding the types of problems encountered during the first year. In another question, approximately 75% of the project staff commented on the types of problems encountered during the first year. The difficulty most often cited was the late start of the first year's activities (including late receipt of the packages and other required materials). Inadequate orientation for project staff, another frequently cited difficulty, appears closely related to the late start. The third most frequently mentioned problem was inadequacy of materials.

Nonproject staff were somewhat less likely to comment on specific problem areas. Approximately 10% commented that they were not able to describe the problems associated with the projects, and another 10% reported that no serious problems had been encountered. The remaining 80% tended to cite lack of communication between project and nonproject personnel, insufficient orientation for nonproject staff, conflicts with the regular schedule, and to a lesser extent, late start.

Familiarity with the Programs and the Packages

In all six PIPs, the importance of an informed, knowledgeable project staff is noted. Project teachers are expected to be able to communicate program goals and discuss instructional methods and materials with other school and district personnel and with parents of participating children. Nonproject staff are also expected to have some familiarity with the programs being implemented in their schools.

Table 43 displays five variables created from the ISQ on staff understanding of the programs and their exposure to relevant materials. The first, "Understanding of Project," describes perceived level of understanding of project goals, organization, and instructional techniques. Reported comprehension was generally high; less than 3% of the project staff and 12% of the nonproject staff indicated little or no understanding of project goals and objectives. Project management and instructional techniques were somewhat less widely understood, although approximately 95% of the project teachers and aides and 75% of the nonproject respondents reported at least a moderate level of understanding in these areas. As might be expected, project staff reported a significantly higher level of familiarity with the projects than did nonproject staff.

The second variable displayed in Table 43 describes the proportion of staff who indicated they had seen the PIP orientation filmstrips. These filmstrips were provided with each package and were intended for use in orientation sessions during the start-up stage. Approximately 75% of the project staff and 24% of the nonproject staff recalled seeing the filmstrip. Use of the filmstrip for orientation of nonproject staff was particularly low at Catch-Up sites. About 80% of the project staff and 25% of the nonproject staff recalled having seen the PIP box or package. Somewhat fewer had actually read or studied any of the packaged materials (77% of the project staff, and 15% of the nonproject staff, just over half of whom were from PTR sites).

The final variable, "Amount of Package Read," reflects the number of components respondents reported having read. Only those respondents who indicated they had read at least one of the items listed were included in calculation of the mean scores. Thus, the mean scores are based on responses from 80% of the project staff and 15% of the nonproject staff

Table 43

FAMILIARITY WITH PROGRAMS AND PACKAGES

Respondent Group	Understanding of Project Range = 1 (High) to 5 (Low)		Orientation Filmstrip Range - 1 (Seen) to 3 (Not Seen)		Seen PIP Box Range = 1 (Seen) to 3 (Not Seen)		Read/Studied PIP Materials Range = 1 (Read) to 3 (Not Read)		Amount of Package Read Range = 0 (None) to 1 (All)		Combined Rank
	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	
Catch-Up	2.17	3	2.49	6	2.10	5	2.21	4	0.63	4	4.40
Conquest	2.31	4	2.09	4	2.00	4	2.23	5	0.42	6	4.50
HIT	2.01	2	1.83	2	1.81	2	2.00	3	0.65	3	2.40
IRIT	2.44	6	2.15	5	2.24	6	2.52	6	0.75	1	4.80
PTR	1.99	1	1.73	1	1.61	1	1.79	1	0.67	2	1.20
R-3	2.33	5	1.87	3	1.82	3	1.99	2	0.52	5	3.60
p ≤	0.10		0.01		NS*		0.10		0.01		
Project	1.63		1.47		1.30		1.40		0.62		
Nonproject	2.67		2.46		2.39		2.65		0.37		
p ≤	0.01		0.01		0.01		0.01		0.01		
All	2.22		2.02		1.92		2.11		0.58		

*NS = not significant (significance level is >0.1).

(again, nearly half of the nonproject group was from PTR). As would be expected, project staff reported a higher level of familiarity with the packages than did the nonproject staff. But, perhaps because at the beginning of the year only one copy of each component had come to the sites as a part of the PIP and because even this single copy arrived just before school began, not all the project staff had read the PIP implementation materials. The typical project teacher or aide had read more than half of the materials listed while the average nonproject staff member had read only about a third of the items. Package components most widely read by project staff included:

Staff Qualifications and Preparation Checklist	73%*
Project Overview	71%
Classroom Management Director	67%

The components least widely read were:

Project Management Displays	44%
Student Relationships Album	55%
Project Management Directory	56%
Professional Relationships Guide	58%

It appears that the student and staff relationships guides were not used as widely as intended. Differences on mean scores for each package indicated that IRIT staff, where three project teachers were all at one location, had read the largest number of components, and Conquest staff, located in from three to seven schools within the district, had read the smallest number.

Ranks obtained by each program on the five variables were combined to produce an average rank on respondent familiarity with the programs and exposure to the packages. Ranks obtained for PTR, HIT, and R-3 reflected higher overall levels of familiarity than those for the other packages. Exposure of nonproject staff to the filmstrip and package components was generally low; only at PTR sites did fairly large proportions of nonproject staff report exposure to the packaged materials.

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*Percent of project staff who had read at least one PIP component or subcomponent.

Staff Assessment of the PIP Materials

ISQ data reflecting opinions about the packages (as opposed to the projects) are displayed in Table 44. Mean scores for all variables in this dimension were derived from responses of only those teachers and aides who reported some familiarity with the packages. This restriction excluded about 25% of the project staff and 90% of the nonproject staff; half of the nonproject group were from PTR sites. The first two variables deal with perceived clarity and usefulness of each component. The grand means of 1.47 and 1.62, on clarity and usefulness, respectively, reflect fairly positive overall assessment of the package components. The specific components receiving the highest overall ratings were the Staff Qualifications and Preparation Checklist, the Student Relationships Album, and the Classroom Management Directory. Materials in the hardware/software component (brochures, materials lists, information sheets) received the lowest ratings. On both of these variables, the PTR and HIT materials received the highest ratings, and R-3 the lowest. This was an understandable result in light of the fact that PTR and HIT materials are few but provide the major element in the instructional program; some of the R-3 materials, on the other hand, were developed by the original project staff, were based on locally relevant themes, were more difficult to order, and had to be adapted to the new sites or rejected as inapplicable. In answering questions on the hardware/software components, respondents undoubtedly reacted to the clarity of the curriculum materials suggested by the PIPs as well as to the clarity of the recommendations in the PIP.

The third variable reflects respondent opinions of how well several major aspects of project operations (staffing, pupil relation,

Table 44

ASSESSMENT OF THE PACKAGES

Respondent Group	Package Clarity Range = 1 (High) to 3 (Low)		Package Usability/ Effectiveness Range = 1 (High) to 3 (Low)		Package Description Range = 1 (High) to 5 (Low)		Extent of Revision Range = 1 (Low) to 3 (High)		Combined Rank
	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	
Catch-Up	1.46	3	1.64	3	2.20	5	1.61	3	3.50
Conquest	1.60	4	1.76	5	2.18	4	1.80	4	4.25
HIT	1.28	2	1.53	2	1.56	2	1.48	2	2.00
IRIT	1.62	5	1.73	4	2.41	6	1.91	6	5.25
PTR	1.13	1	1.13	1	1.37	1	1.22	1	1.00
R-3	1.66	6	1.86	6	2.06	3	1.86	5	5.00
p ≤	0.05		0.01		NS*		0.01		
Project	1.51		1.68		1.97		1.69		
Nonproject	1.29		1.20		1.50		1.09		
p ≤	0.10		0.05		0.10		0.01		
All	1.47		1.62		1.90		1.63		

*NS = not significant (significance level is >0.1).

instructional techniques, and the like) have been described in the packages. The mean scores again indicate a generally positive assessment of the packages; only 5% to 15% of the respondents considered any of these aspects to be described poorly or not at all.

The final variable describes the extent of revision considered necessary. Need for revision was most widely perceived in the following areas:

Sample lesson plans.

Listing of essential instructional materials.

Guidelines regarding quantities of materials to be ordered.

Guidelines for coordinating project activities with regular school activities.

The areas generally considered least in need of revision were:

Description of hierarchical relationships among project staff.

Description of specific responsibilities of each staff member.

Staff appeared to find revision most needed for materials related to specific tasks and functions (ordering materials, planning lessons, coordinating activities with the school schedule); revision was considered less important for general information and descriptive materials (goals, staff responsibilities and relationships). Differences across packages on this variable were highly reliable. PTR and HIT were rated least in need of revision while the IRIT and R-3 packages were judged most in need of improvement.

Summary of Findings

Data from the Instructional Staff Questionnaires suggest strongly that the projects implemented during the first year of the field test achieved a high level of acceptability to teaching staff. Project instructional staff reported particularly positive reactions. Nonproject teachers and aides, while generally somewhat less enthusiastic, also indicated favorable reactions to the projects that had been implemented in their schools. In spite of the fact that the programs had been developed in other districts, most staff reported that the projects were highly relevant to local needs. Some adaptations to specified policies and procedures were generally perceived as necessary, but a large majority of teachers familiar with the guidelines reported a moderate or strong resemblance between the original specifications and the operating projects.

The packages were generally considered to be useful sources of information about the programs. Staff familiar with the packages commented throughout the year, both during interviews and on the questionnaires, upon the need for specific improvements to the packages. Many of these suggestions included requests for more detailed guidance on the actual daily operations of the instructional programs--more precise information on what materials to obtain and how to order them; more complete training information; pictures and diagrams of the instructional setting; sample lesson plans; and other help. The need for guidelines and training that goes beyond description of goals and introduction of new concepts and resources has been cited in other studies of attempts to install innovative educational programs (e.g., Rand Change-Agent study). It might be expected that teachers would indicate a need for specific suggestions on how to use new materials, how to draw up individualized lesson plans, and so forth, in a program where such heavy emphasis was placed on replication.

Most of the local instructional staff reported benefits to at least a substantial number of participating students in terms of improvement in academic skills, increased motivation to learn, and exposure to a variety of new materials and opportunities. Project teachers frequently reported improvements in their own managerial and instructional skills.

There were few reports of negative impacts on students or staff, although introduction of the new projects did apparently create some disruption to regular school and classroom schedules. Project teachers and aides generally associated this disruption, as well as other problems, with the program's late start.

Nonproject staff in particular noted the need for improved communication between project and nonproject staff. The importance of frequent communication, through personal contacts or written progress reports, is noted in all six packages. It is also suggested in the packages that the orientation filmstrip be shown to nonproject staff and that sending teachers be encouraged to visit project classrooms or laboratories during instructional periods. Interview and questionnaire data suggest that the frequency of contact was substantially lower than anticipated, that the orientation filmstrip was not widely used for orientation of nonproject staff, and that probably less than half of the nonproject staff had observed the instructional programs in operation.

One aspect that was missing in the original PIP concept and was not anticipated in the questionnaire design, but turned out to be one of the most striking impacts on project staff, was a sort of "pride of ownership" of the project that developed. This was the feeling on the part of project staff that it was they, not the package or outside consultants, who had created this special project. In conversations at the field-test sites, this sense of pride was unmistakable. Obviously, some of the major problems of uninvolved staff, noted in other studies of dissemination and adoption via packages, did not typify the PIP field-test projects.

Impacts of PIP Projects on Parents and Community

We used several informal strategies for gathering data on parental and community reactions to the PIP projects in the first year of the field test. For purposes of deciding whether PIPs are a viable mechanism for getting exemplary projects into new communities, we wanted to detect any resistance by parents or other segments of the community to the packages or to the projects as described or as implemented locally.

Resistance was not anticipated in the PIP concept; in fact, the ASK assumes community acceptance as a prerequisite for receiving PIPs.

We sought general information on whether parents were aware of and informed about the PIP project; whether there was any resistance to the concept or the project; and whether parents were involved or participating in project activities.

Through the site visits, we kept track of general community attitudes during the year. In February we telephoned or talked in person with parents. We obtained teachers' and principals' opinions of parental and community feeling through interviews and the questionnaires. We inquired of project staff about parental involvement.

The general findings are that most parents of participants are aware of the existence of the project and their child's participation in it (often through permission slips if through no other channel). However, most parents are not well-informed; they generally understand that their child is participating in a special reading project; for those programs involving mathematics, some parents are aware of this aspect. They are not well-informed about the nature of instruction although they may know of special project rooms and the existence of special equipment and materials. The only misunderstandings parents had centered on whether their child or children had been singled out for special education and categorized as retarded or disabled. Principals and teachers reported that they had to reassure several parents that this is not the case in PIP projects.

Parents' attitudes toward the projects were, in general, favorable. Eighty-nine percent of the 61 parents informally polled in 14 projects had very favorable impressions of the project and their child's participation. Interviews with principals and teachers confirmed this poll. Teacher opinions on the ISQ indicated that opinions grew more favorable during the year. When asked if they thought that parent reactions to the program had changed over time, 54% of the 171 project teacher respondents felt that parents' attitudes had become more favorable to the project while 32% felt that there had been no change. Fifteen percent had no basis for an answer. Thirty-six percent of the nonproject teacher respondents felt that parent attitudes toward the program had improved while 30% felt that there had been no change. Thirty-four percent had no basis for an answer.

Another indication of project acceptability was the interest in the PIPs expressed by parents who did not have children enrolled in a PIP project. On the ASQ half of the district administrators, 78% of the project directors, and 60% of the principals polled said that they had talked about the programs with such parents, and over half of the parents indicated a desire to have their children enrolled in the program. Of the ISQ sample, 47% of the project teachers and 21% of the nonproject teachers said they had also discussed the program with parents who did not have children in the program. Of those who had discussed the project with nonparticipant parents, 41% of the project teachers and 33% of the nonproject teachers felt that the parents were interested in having their children enrolled in the program.

Evidence also indicated that there was little resistance to the program on the part of the community. In some communities, especially the larger ones, little notice was given to the project by the public. But in some of the smaller communities, the Title III grant was considered quite an event. Local newspapers published favorable stories about the project in quite a few communities. There were no critical or controversial articles about any project. During interviews at one or two sites, either the teacher associations had some objection to the endorsement of the project by the School Board, or project leaders felt that teacher associations might object to certain teacher requirements in the PIPs. However, no indication of further controversy was reported during the school year. Forty-two percent of all the respondents to the ASQ felt that there was no community resistance. When asked what factors did contribute to resistance or negative reactions by the community, one-third of the district administrators and project directors could only think of the delayed start of the program. Instructional staff felt that poor communications and poor experience with previous special programs were possible reasons for any community resistance.

Both the ASQ and ISQ asked respondents how community acceptance of the projects could be improved; the question included four suggested methods. Respondents on the ASQ felt that reports of positive findings would be the most important, followed by having community members visit the project, having informative meetings, and providing the press with favorable publicity, in that order. All of the project directors who responded felt that reports of positive findings were the most important, as did 88% of the principals. Project directors were less interested in meeting with members of the community than the principals who felt that the least important method of improving community acceptance was favorable publicity. As we reported earlier, efforts to inform and involve parents and the community have not been very thorough or systematic in most projects. In several sites, this lack may be intentional. Project leaders may have felt that a low profile for the project was important for its acceptance, at least until favorable outcomes could be reported.

Teachers felt that inviting community members to visit the programs and having informative meetings for them was the most effective way to improve community acceptance. Providing favorable publicity to the press was considered the least effective. Nonproject teachers were more concerned with the report of positive findings (81% to 75%). It is not clear if this can be attributed to the fact that, as teachers, they are expected by society to produce good results, or if they are dubious about special programs that have a tendency to look as though they are undercutting the regular educational system.

When asked what other methods might be useful in improving community acceptance, project teachers felt that an effort should be made to enlist more community involvement, that there should be more individual contact with the community by administrative and instructional staff, and that there should be more and better publicity provided to the community. It appears that project staff are aware that efforts to inform and involve parents and other members of the community need to be improved.

The kind and amount of parent involvement varied across the projects. In an earlier section, we concluded that five projects had relatively good parent participation. Staff of these projects and one other expressed pleasure with the amount of parent participation. Six projects expressed concern over low parent participation. The remaining seven projects did not see parent involvement as a problem of major interest or concern.

Two of the five Catch-Up projects and both PTR projects did not elicit enough parent interest to establish parent advisory boards. Although parent advisory boards have been established in the other three Catch-Up projects, these boards did not become as involved as PIP specifications implied they should.

Despite the variations in the amount of parent involvement and in the means of maintaining involvement and favorable public relations, the few impacts of the projects felt in the 17 communities were favorable, and the reactions of the parents, whether they were involved or well-informed or not, were positive.

Technical Assistance

As soon as LEAs receiving Title III grants were identified by USOE, the exemplary project, the government (state and federal Title III and OPBE), and the evaluation (SRI/RMC) offices began monitoring their communications with the field-test projects. We received contact reports throughout the start-up and operations stages primarily for the purpose of tracing the amount and kind of technical assistance obtained by field-test projects. From the meeting in Washington during the selection/adoption stage, the field-test representatives had learned that USOE hoped that no technical assistance would be necessary, since the PIPs were supposed to be autonomous. In a few instances the PIPs contained suggestions for obtaining technical assistance at the project director's discretion.

Several categories of assistance requests and sources of information emerged immediately on the contact reports:

(1) Inquiries about PIP delivery or about the Title III grant budget, federal guidelines, USOE requirements, and the like. These inquiries were mostly to USOE and state officials; several calls were often necessary before an answer was obtained. RMC was called by some for PIP delivery times.

(2) Inquiries about evaluation procedures. These included phone calls to and from SRI (and sometimes USOE and RMC staff) for coordination of the local project plans for student selection and evaluation with the needs of the national evaluation.

(3) PIP-recommended communications with publishers, manufacturers of instructional equipment, local evaluators, and training consultants.

(4) Inquiries about problems, clarification of PIP specifications, desires for adaptation of project to local conditions, and the like.

The phrases "autonomy" and "technical assistance" were meant to pertain only to this last kind of assistance request. Autonomy meant that

PIPs were to be relatively free of "how to" assistance. The first two kinds of assistance described above were not anticipated (and the implications of the second can be ignored, assuming that future PIP project evaluations will be local). And yet, project directors had to know whether they would be required to submit progress reports to the state Title III coordinator, whether they needed to follow through on identifying their proposed control group, and whether they could transfer funds from staff categories to buy additional materials that were specified in the PIPs but not anticipated in their grant budget.

The third kind, PIP-recommended assistance, can be considered as being in the line of normal project business, and thus not infringing on the concept of autonomy. Training consultants were rarely obtained from outside the district, and publishers' services incurred no additional costs over the materials costs.

The "how to" kind of technical assistance in implementing the projects was solicited from RMC, from federal program officers, and less and less reluctantly during the school year, from project directors at the exemplary program sites. Quite a few contacts were initiated by PIP field-test project staff because of the ambiguities, contradictions, and mistakes in the new PIPs, the confusing rules-of-the-game imposed by the demand for "exact replication" (according to those ambiguous PIPs), and the difficulty of knowing who could give a definite answer to any particular question or definite "approval" to a proposed adaptation.

Table 45 shows the number of recorded contacts to original sites, government offices, and evaluators by field-test sites (grouped by PIP) during the start-up and operations stages. One has to be careful in interpreting frequency data from contact report forms since some people simply used the telephone more frequently than others, a USOE program officer visited some sites and may have affected the need for assistance,

Table 45

NUMBER OF CALLS RECEIVED BY GROUPS FROM PIP SITES

PIP	Originating Project Director		Federal Government		SRI/RMC		Total
	Start-Up	Operations	Start-Up	Operations	Start-Up	Operations	
Catch-Up	7	6	7	4	6	5	35
Conquest	2	7	6	6	5	3	29
HIT	2	2	0	1	3	3	11
IRIT	1	9	4	4	1	3	22
PTR	0	4	6	2	4	1	17
R-3*	5	13	3	24	4	7	57
Totals	17	41	26	41	23	22	171

*Contact with the exemplary program site was required in the R-3 PIP, since gaming/simulation materials had to be obtained from the original project director.

and some people were more reliable about reporting contacts than others. Nevertheless, the totals for each PIP correspond to the general levels of difficulty experienced by PIP groups, with the PTR, HIT, and IRIT projects requesting less assistance than Catch-Up, Conquest, and R-3 projects. Considering that there were 19 projects, the average number of phone calls (3) to the original site was fairly small for implementing a project with untried information packages.

Only two or three visits were made to the original sites, after field-test projects were well into the operations stage. Only one original project director visited several field-test sites to advise the staffs at the new projects and see how well they had replicated her program. Other field-test sites expressed the desire to see the original program but were discouraged by federal officials on the basis that evaluators could better determine if implementation without in-person exchanges was possible.

The nature of the calls in the start-up stage differed from that of the calls in the operations stage. During the start-up stage, major topics were: delivery of the PIP components; budget matters; grant requirements; and the need to adapt PIP start-up specifications to the local circumstances. During the operations stage, field-test project staff (sometimes lead teachers as well as project directors) called the original site to obtain assistance in implementing the instructional program on which PIPs contained insufficient information. Calls to Washington turned from requests for approval of adaptations and modifications to questions of second-year funding and grant reapplication.

In addition to differing by topic, contacts for assistance seemed to serve different purposes. Although it is unwise to infer too much from contact reports, even supplemented by direct queries during interviews, we felt that contacts serve several functions that can be roughly categorized.

Phone calls to original sites were sometimes made in order to obtain answers to specific questions about program implementation, especially when the original director's word could be assumed to be the most definitive answer (in comparison with the PIP, RMC's answer, and the answer from one or another government office). But contacts were also made for reassurance that the practices being employed at the field-test site were all right. Field-test staff sought confirmation that they had replicated the program, sympathy with their problems, support for their attempts to implement, and assurance that they were making appropriate progress. These contacts occurred soon after the operations stage began. One project director's visit to the R-3 exemplary program site was almost exclusively devoted to seeking understanding of the problems encountered in the field-test site. A visit by a project director to the original IRIT site in Hartford seemed primarily to serve the purpose of assuring him that his field-test project was as good as the original (or even better than the original in some respects).

Contacts with federal officials, and to some extent with SRI and RMC, were for different purposes. Without going into detailed descriptions, we list the following purposes stated by at least some field-test project directors:

- To obtain "clout" within the school district for carrying out PIP recommendations or to get help in resolving conflicts of state and federal regulations.
- To test the flexibility of PIP specifications or the limits of modifications allowed, and to get "approval" for adaptations to PIP specifications.
- To clarify PIP specifications or to clarify what is "essential" in the PIP.
- To request more funds, budget information, or permission to transfer funds between budget categories. (The latter was sometimes different from, and sometimes the same as, testing the flexibility of PIP specifications.)

- To find out what Title III (state or federal) regulations and OPBE officers required.

A contact report from a federal official, quoted below, illustrates several of these categories. "The project director asked for reassurance that 9 full-time aides were needed for the program. She said that the LEA budget person needed authorization to allocate the money. I told her to call the federal Title III people for authorization. With respect to ordering materials (the project director) had checked with (the original site) about a number of so-called core items (i.e., starred items in the PIP), and (the original director) had indicated that the starred items were only suggested and could be ignored. She noted, for example, that the ordering of a record player for each R-3 classroom, when those in the system were not used, did not make sense. With respect to the seventh grade social studies curriculum, the project director notes that Africa and Asia are included. Since it appears that the gaming/simulation units received to date do not cover these topics, she wanted to know whether or not to scrap the social studies curriculum. We agreed that for the time being she would. The project director found the curriculum units received to date very difficult to use. She noted that the units did not indicate what subjects they were attempting to teach, nor what behavioral objectives applied to them."

Whether or not staff at the tryout sites actually obtained assistance or permission, they managed to solve their problems or decide on an answer to their own questions. That, added to the fact that little contact was made with the original project directors until after the instructional programs were underway, indicates that PIPs (at least revised, improved PIPs) can be autonomous or nearly so. Complete autonomy from "how to" assistance is not necessarily desirable from all points of view. There was a definite desire on the part of field-test sites to get advice from other educators about the best way to resolve schedule conflicts, the best way to utilize certain equipment or curriculum materials, and the like. From a cost/effectiveness point of view it seems important to require that visits be minimized or be made only at critical points when specific questions can be addressed. But very inexpensive forms of sharing (e.g., telephone contacts) would not seriously affect costs, and it might be of great assistance to project staffs immersed in the implementation activities.

It was clear from contacts made during the early stages of the PIP dissemination effort that, while packages may be able to communicate "how to" information without assistance, they do require some dissemination agent. They do not get to new sites on their own and they do not answer questions, if there are any, on financing or regulations for use.

Summary of the PIP Field Test Results

Selection/Adoption Stage

Seventeen school districts[*] are participating in the first field test of Project Information Packages. They applied for a Title III grant to fill one or another need in their districts--hoping that the funds would allow them to serve a group of children not already served by Title I. An Analysis and Selection Kit, describing the available alternative programs and designed to assist LEAs in adopting the most appropriate one, was not yet available for use when they applied. Most LEA applicants were aware only that they were to receive programs that had succeeded elsewhere and that these would be in a form called PIPs.

On the basis of proposal quality, and to some extent on the advice of state Title III coordinators, USOE decided on grant awards. Although information in the grant applications was not particularly appropriate to the purpose, USOE assigned the six PIPs to sites, primarily on the basis of applicants' descriptions of grade levels with the greatest needs. Closer matching of the district characteristics with the original, exemplary district was not feasible with the information available.

The idea that all they had to do to obtain significant achievement gains was replicate the originally successful project as described, was not a motivating factor for LEAs applying for PIPs. However, because replication was a condition of the grant, the great majority of district staffs were willing to adhere to the package instructions in implementing the projects.

Participating school districts ranged in size from Dallas, a large city, to the Oak Grove Attendance Center in Illinois, a small community where each teacher in the single school was responsible for two grades. The majority of the PIP project sites were small cities or small rural districts. The original project configurations thus had to be scaled down for a single school or fewer students. The cost per pupil rose correspondingly.

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[*] Two of the school districts each have two different FIP projects, making a total of 19 field-test projects.

It was during the period when PIPs and then the ASK were being developed that the opportunity for field testing them in FY 1975 arose. The brief time available to USOE for releasing PIP application information, reviewing applications, awarding grants and the like meant that an orderly system for PIP dissemination and grant monitoring was not planned. In addition, while PIP developers had assumed that LEA representatives responsible for grant applications would become the project leaders upon grant award, for 12 of the 19 projects this was not the case. The sources of information of various kinds, the lines of communication, and the roles of various actors (OPBE, the Title III program office, the developer, the evaluator, the LEA administrators, the new project directors) became confused.

District size interacted with the specifications in the PIP to affect the role of the project director. In small rural districts, project directors were usually people with autonomy and authority similar to that of the project director in the original site. As district reading coordinators, federal projects directors, or assistant superintendents, they had participated in the grant application and also assumed the role of project director. In all but one large city district, the person assigned to be project director was given sufficient autonomy in hiring and budget matters to conduct the project. However, to meet the PIP and grant requirements several districts of intermediate size appointed a nominal project director who was not actually in charge of managing the project. The higher level district administrator retained control of the project budget and performed training, orientation, and staff hiring roles; the role of the project director as assistant and resource person thus added unnecessary costs to the projects.

To summarize the implications of these events for the underlying assumptions of the ASK-PIP concept, it appears that:

- We cannot say whether, if ASKs were available, LEAs would apply only for programs in contexts that match their own. However, it is doubtful that they would know the relevant dimensions merely from descriptions of the original program sites such as the draft ASK contained.
- Under the same funding circumstances, it is doubtful that LEA administrators would reject a PIP grant on the grounds that the original site had some quite different features from theirs. The idea of replicating most features of the project in order to get the same results did not seem necessary to district staffs.
- The project director was not automatically involved in the grant application. The involvement of the project director probably depends on the size of the district. It probably also depends on whether the grant has enough money for a project director's salary and whether the application specifies the potential project director's involvement.

As expected by RMC, LEA motivations and context mismatches had profound impacts on the start-up processes in the field-test projects. The actual selection/adoption processes that occurred made it clear that the role of the dissemination agent and the lines of communication among participants in the adoption process must be considered, along with the ASK and PIP materials, as necessary parts of a workable dissemination strategy.

Start-Up Stage

Many of the problems that field-test project staff encountered in implementing the PIP specifications were rooted in the selection/adoption stage. Although the selection by USOE of sites for PIPs rather than the selection by LEAs of PIPs for their district was unanticipated in the ASK-PIP concept, the placements would probably not have been different if these LEAs had selected their own PIP projects. Assignment of PIPs probably did not affect motivation to implement either, although it might have if project directors themselves had applied for a particular PIP and then been assigned another. However, contextual mismatching did increase the chances that LEAs could not meet some of the PIP requirements in terms of availability of qualified staff and appropriate student population.

The late and piecemeal arrival of the PIP components made it difficult or impossible for the specified start-up activities to be conducted according to the sequences, time deadlines, or procedural recommendations in the PIPs. Components 1-4, the Starter Set: Planning, Project Management Directory, Displays, and Staff Qualifications and Preparation Set, and component 9, the Hardware/Software Packet, were sent to the LEA offices in July. By mid-August the project directors had the PIP box and the rest of its contents.

First, project directors themselves had to gain a thorough understanding of the program. Then project staff had to be chosen or hired; staff and school principals had to be oriented to the project; instructional materials and equipment had to be selected or ordered; arrangements for classroom space had to be made; and furniture and supplies had to be surveyed and orders placed as necessary. The project directors were also responsible for planning and conducting preservice training for staff, which in itself was a formidable task given the time available. Clearly, for programs such as Catch-Up, whose calendars were to begin in March, the arrival of the PIP was extremely late. Even the PTR package, with the shortest lead time, arrived a month or two after its intended arrival time.

If adequate time had been allowed for selection/adoption and for start-up activities, some of the problems encountered in the field-test sites would never have arisen. It was because of the dedicated efforts of project directors and staff that problems were resolved and the projects became a reality.

There were two other sources of confusion during the early stages of implementation: (1) the written information in the PIPs, and (2) USOE's rules for seeking assistance.

The PIPs, having never been tried out before, contained contradictions and ambiguous statements, lacked rationale or critical information on some topics, and were organized in a fashion that hindered easy reference.

Guidance from USOE was also confusing. PIP project staffs were discouraged from seeking technical assistance, but neither OPBE nor Title III staff was informed enough, when called upon, to clarify PIP specifications or to decide whether certain adaptations were acceptable. It was not obvious whether the PIP developer (RMC) or the original site should be contacted, and it was not clear who should contact them. Again, the packages, by themselves, did not comprise an entire dissemination strategy. In the future, it appears that the dissemination agent must either relinquish control over project implementation or must establish procedures for recipients to clarify specifications and guidelines.

Project directors tried to compensate for the difficulties and worked hard to achieve the results desired in the PIP-specified manner. Thus, by the beginning of the school year or a few weeks thereafter, the main elements of the projects were present. The project staff, most of whom were appropriately qualified, were on hand, although not too well prepared for the instructional tasks ahead. Classroom and other facilities were already provided with most of the required PIP equipment and many of the instructional materials. Appropriate student selection was accomplished in most sites by the first few weeks of school.

It was in the areas of preservice training and orientation of non-project staff that the most critical and most widespread deviations from PIP specifications occurred. This was partly due to time pressure. It was probably also due in part to the fact that the package, even with the filmstrip and written components, did not communicate enough about the nature of the instructional program to permit project directors to lead inservice sessions or orientations with confidence. For project directors and district reading coordinators who have participated in a similar project before, this was not a problem. Probably no packaged descriptions or instructions would be entirely adequate to enable a project director to train and motivate others for a program that was quite unfamiliar to him. The PIPs assume that the potential project director will be involved in selection, and that a program with compatible philosophy and methodology will be adopted.

One lesson to be learned from the start-up stage is that even if there is close and well-informed monitoring, some adaptations of original project activities are necessary. Packages cannot anticipate which adaptations will be necessary and desirable at every possible new site, therefore packages ought to insure that the rationale for different activities and procedures is included. That is, the expected outcomes at each stage should be described and their dependencies made clear, while methods for obtaining those outcomes are stated as recommendations. A new district can then decide for itself the consequences of any changes it wishes to make. The recommendations for PIP revisions (Volume II) are based on this notion.

Operations Stage

In spite of the difficulties encountered by LEA personnel in obtaining the Title III PIP grant and in attempting to implement the PIP specifications for the start-up stage, project installation was accomplished. In every site, with the possible exception of one, there was a PIP project (or projects) in existence. The Title III PIP projects were all recognized as entities in their school districts. And at least by February, in all but a few schools, the instructional programs were implemented as specified in the PIPs. Across sites, classrooms of one type of PIP project were very much like one another, and they were clearly distinguishable from classrooms in projects based on other PIPs.

With just the information and instructions in the packages and almost no outside assistance, project staffs had created projects resembling the original--at least insofar as they were described in the PIPs. The details of the instructional program and the teaching-learning sequences were left unspecified in four of the six PIPs.* It was left to the discretion of the trained and qualified instructional staff to recreate the original, effective conditions for student achievement.

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*For example, several PIPs specify the use of "diagnostic-prescriptive" techniques or specify that instruction should be "individualized," but they go no further. Implicit in the specifications is the assumption that teachers will implement the techniques adequately and that instruction will be appropriately individualized. The PIPs do not contain explicit criteria or descriptions of adequate replication of the curriculum against which to check the field-test projects.

PIP Project Impacts and Outcomes

The implementation of the instructional program and other project aspects in the operations stage is of the greatest concern, since the PIP concept assumes that if the original exemplary program is replicated, the original outcomes will result again in the new site. Although the PIP concept is clear that student outcomes are the focus, the achievement gains obtained in the original sites were not measured during their start-up period, and it would not be appropriate to judge the new projects on the basis of student outcomes during their implementation.

Nevertheless, we conducted a preliminary assessment of achievement outcomes on a sample of project students. In addition we measured the impact of PIP project implementation on student attitudes. The attitudes of school staffs attempting to implement the projects via PIPs and the general attitude toward the projects on the part of parents and community were also assessed.

In a sample of PIP participants, achievement outcomes relative to the norm group on the Metropolitan Achievement Test* were not "educationally significant" in terms of the specified criterion (one-third of a standard deviation beyond normal growth expectation). We examined several properties of the two-part criterion, including its relation to evidence of effectiveness in the original exemplary programs, but left explanations of the test results to be explored in the second year evaluation.

Student attitude inventories revealed no problems during the implementation year. In fact, PIP-specific questionnaires showed that most students were happy with the unique aspects of the projects and did not feel any stigma attached to participation.

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*Or, in PTR, as measured on the Murphy-Durrell Reading Readiness Analysis and the MAT Primer relative to expectations based on non-PTR group performance.

By February, as far as PIP project staffs were concerned, the projects were a source of considerable pride. They felt that the PIPs had been useful, fairly clear, and effective. They believed their projects closely resembled those described in the PIP. In addition, nearly all felt that participation in the PIP project had increased their professional competence and they would recommend the PIP to colleagues. Almost everyone reported on the questionnaire that he would like to be involved in the project again.

The nonproject instructional staffs in the schools where PIPs were implemented were also supportive of the projects. The major difference between project and nonproject staff was that the latter were more aware of disruptions in classroom schedules and curriculum continuity.

Most parents were aware of the projects and of their children's participation in them. Although they had little program-specific information, they were favorably disposed toward the projects. There were no objections to the projects on the part of parent or community groups in any of the 17 participating school districts.

In conclusion, the first part of the question regarding the viability of the PIP concept can be answered in the affirmative. Under the conditions of the field test, almost every project was implemented in new sites and there was considerable fidelity to the specifications in the PIP. Very little technical assistance was required although more was desired. Staff became enthusiastically involved in the implementation of the projects on the basis of the packages and were pleased with their accomplishments.

V LESSONS LEARNED ABOUT PACKAGING

The previous chapter focused on the findings from the evaluation of PIPs in their first field test. In this chapter, we examine the results of this field test of this one set of packages to extract lessons about packaging in general, as a way of getting exemplary programs into use in new school districts. We do this by bringing the principles and assumptions embodied in the PIP concept into focus again and examining each of them in light of our findings, determining their soundness, and speculating on alternatives when they do not appear sound.

Criteria for Identification of Exemplary Programs

The criteria employed in selecting the six original programs for packaging can be examined for their impact on the initial desirability of the programs to the potential users (LEAs) and for their impact on ease of implementation at new sites. In addition, the suitability of this particular set of criteria for future diffusion under USOE's auspices can be examined.

Effectiveness Criterion

The fact that the packaged programs had proved successful was relevant to the LEAs who were potential users. However, while it was important for getting a program adopted that USOE had declared effective in terms of student achievement, the particular criterion of effectiveness on which RMC had based their choices among programs was of no interest to LEA staffs. It seems likely that similar projects with Dissemination Review Panel approval or some expert endorsement would have been just as acceptable.

The definition of a criterion of effectiveness against which projects were to be measured in the area of achievement is a considerable advance in selecting "exemplary programs" for federal endorsement and dissemination. In spite of properties of the particular criterion that prevent it from being uniformly interpreted across different tests and subpopulations, and in spite of the unlikelihood of agreement on "educational significance," selecting programs on the basis of evidence showing the treatment to be better than no treatment was a step forward and meant that those selected had attained a fairly high standard, compared to others available.

The precedent established by OPBE in deciding that only projects meeting such criterion are to be packaged and offered to LEAs is important, if USOE eventually wishes to promote improved program performance in terms of student learning in schools across the nation. At present, except for the PIP effort and a new evaluation assistance program for Title I projects, USOE does not judge exemplary project performance agency-wide on this basis. Were the Dissemination Review Panel to use this strict a criterion of effectiveness, it seems clear from RMC's experience that very few projects would be found acceptable for approval. As it is, the Panel has approved over 130 projects for dissemination.

Cost Criterion

The importance of this criterion in choosing any program for dissemination--whether via packaging or other means--cannot be overemphasized. The capability of a school district to implement a project (and thus the acceptability of the project to the district) is extremely dependent on the cost of the project to that district.

In one of the poorer rural districts participating in the field test this year, the superintendent reported that the project could not even have been contemplated without accompanying federal funds. He stated in an interview that the state funds received were terribly inadequate and assistance was needed for all grades because the bulk of the districts' students were performing below grade level on standardized tests (66.37% of the 3,685 students in grades 1-12, according to the superintendent).

Horst[*] has distinguished projects designed to change activities of existing staff from projects that add on to existing staff and has suggested that "we can expect compensatory education projects to be add on projects." Changing the activities of existing staff in most schools means changing the activities of classroom teachers serving some non-Title I-eligible students. Thus, federal compensatory education programs (funded under Title I) are generally add-on programs since economically disadvantaged children must be separated out for treatment. The six original programs chosen for packaging were within a cost criterion that was set very high--perhaps necessarily for compensatory programs.

To the LEAs applying for PIP grants in 1974, equally important with meeting the needs of children in deciding to apply was the fact that the federal government was going to provide $100,000 to permit project implementation. Although one district, receiving the same PIP as the rural district described above, stated that the $100,000 federal grant was a mere "drop in the bucket" relative to its local Title I grant funds, even this district applied primarily because of the funds involved, not because the programs were especially well suited to problems in their district. We do not have a way of knowing for certain whether these six PIPs would be acceptable without such grants of funds. Evidence from interviews with administrators in the 17 sites indicates that very few would have applied for PIP programs without accompanying funds if they had been aware of staffing and other high cost items. However, as Table 13 in Volume III shows, districts might have resources

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[*] Memo to SRI from Donald P. Horst, dated 2 April 1975.

(e.g., facilities) on hand or resources that can be reallocated (Title I-supported project directors, teachers, and aides). Original dissemination awareness materials could be geared to showing how resourses could be reallocated so that an expensive program could be implemented without greatly increased outlays on the part of the adopting districts.

The costs of implementing the projects in the field-test sites this year were primarily determined by the federal allocation under the Title III grants, and the configuration of schools and staff/student ratios in each district. The range in per pupil standardized costs across projects within PIPs was considerable, reflecting variations in configurations across districts. For some districts using the same program, there were per pupil cost differences of as much as $600. The original cost criterion of $475 annualized and $1,000 for start-up were based on a flat per pupil rate. Such figures are useful as screening for criteria for choosing programs to package; however, future attempts to set cost criteria for packaging should also take into account the likely pattern of local, state, and federal resources available for recipients of the packaged programs. Such attempts should also take into account how much adaptation of resources will be allowable under the dissemination strategy intended. If various adaptations were acceptable and reallocations were possible, the fairly costly programs would have a good chance of being adopted. (For example, if nondisadvantaged children could be included in a treatment group, retrained regular teachers might be employed in the project at little extra cost.)

Applying cost criteria when selecting programs for dissemination is extremely important to the federal government from its own budgetary point of view as well as for the reasons of consumer acceptance. If USOE were to fully fund the adoption of PIP programs, as in this PIP field test, the cost of each project would limit to a small number the sites in which the programs could ever be implemented. To some extent, LEAs obtaining federal support for a project will spend on implementation what they are given. If, as in the case with USOE-sponsored innovative programs over the last 10 years, the government conceives its role as providing only "seed money," then widespread continuation of programs with real extra costs to the districts of $475 per pupil seems very doubtful. However, if the dissemination strategy surrounding packages were to include determination of firm and flexible resource needs of each program and alternative federal-state-local funding options, then criteria for choosing programs to package could be built on these considerations.

Availability and Replicability Criteria

As stated in Chapter 2, programs considered for packaging were weeded out if directors and staff were unwilling to cooperate in helping the packaging effort, or if the project was no longer operating and could not be visited for validation.

The sensibility of these criteria is obvious. It would probably be possible to package a program after a fashion without much help from the staff or with only memories and documents about "the program we ran here last year," but the USOE-RMC decision about programs to select was certainly the most reasonable one.

However, besides its usefulness to the packagers of a program, the existence of an ongoing exemplary project and the willingness of its staff to describe its workings have potential advantages that were not encompassed by the current PIP concept. Rogers and Shoemaker (1971) listed observability or the "ability to observe that the innovation functions as advertised" as one of the qualities of a program that motivates potential adopters. And while it seems clear from the field test of the PIPs that a program can be implemented with as little as one or two phone calls to the original project director, the expressed desire of the field-test project personnel in the start-up and the early operations stage to see the program in operation indicates that ease of implementation would have been positively affected by making original sites accessible to the field-test sites.

Thus, if one were to require that future programs meet the criterion of availability to be considered for packaging, it might also appear sensible, depending on cost and funding arrangements, to permit visits to an on-going specimen of the project. This suggestion implies a change in the original PIP concept of a completely autonomous information package. This suggestion also means that adaptation of the program to the new site would be likely since exact replication would be seen as unnecessary and unrealistic. Educators at the exemplary project would help educators from new sites adjust the project to their local circumstances, including suggesting modifications or elimination of certain activities. Exact duplication of the validated program will also become less meaningful as the exemplary project personnel share their new ideas and practices with the replicating site personnel, rather than sharing the practices they used during the validation period.

Probably most important in the success of PIPs or any other packages is the criterion RMC called replicability. Programs originally considered for packaging were rejected if they required resources not generally available in typical school districts. Although necessarily judgmental and dependent on the organization and methods existing in local schools at a particular time, it is an essential criterion to define and to use in selecting programs for packaging. A great deal has been learned in the field test about what it is that makes programs more and less "replicable." It seems likely that the success of project implementation in this field test was due in great part to the fact that all the programs selected met this criterion to a large extent. There was, of course, variation in replicability among programs, with PTR being most replicable and R-3 being perhaps the least. But it appears that the six programs chosen to be incorporated in PIPs were generally replicable because they were, in the terminology introduced earlier, "add on" programs as opposed to "change" programs. Rather than requiring important changes in school or district administration or major changes in the activities and practices of regular classroom teachers, the six programs, with the possible exception of R-3, required an added administrative unit and a separate project instructional staff.

A few of the implementation problems encountered in the PIP field-test projects provide some detailed illustrations of what would happen if selected programs did not meet the criterion of "required resources generally available in typical school districts." For example, in every Catch-Up field-test site, it was perceived to be impossible to get half-time teachers who would not be employed for the other half of the working day. And in no field-test site did they manage to arrange for all project teachers to work only half-time.

Admittedly, dissemination of Catch-Up itself could perhaps be limited to suburban districts, similar to the original site where half-time employment appealed to a certain segment of the population. And more generally, any packaged program requiring peculiar employment arrangements could be aimed at selected dissemination audiences. But, given two similar programs to choose for packaging (and intended for as wide-spread diffusion as possible), preference should go to the program without unusual requirements. In the R-3 projects, the problems of scheduling, of curriculum coordination among teachers of math, English, and social studies, and of materials availability (teacher-made or developer-made) also provide lessons for future definitions of a replicability criterion for selection of exemplary programs to package. The other five instructional programs were easier to implement because they used techniques more familiar to regular teaching staff and because they required less cooperative curriculum development than R-3 required.

Several other very sensible criteria under the general rubric of Availability and Replicability were used by RMC because of USOE involvement:

- No one commercial publisher or manufacturer's product exclusively required.
- Must be Title I supported or Title I-eligible programs.
- Must be in public schools.

All three criteria were good. We base this judgment on the grounds that since USOE knew some of the constraints that were likely to apply in eventual federal dissemination of the PIP, it was wise to select programs that would be preadapted to those constraints. Insofar as likely conditions for dissemination and support are known, the criteria for choosing programs to disseminate should be adjusted to fit. For example, long-term support for the implementation of these exemplary compensatory programs under Title I was seen as the most likely federal funding possibility after the field test year. USOE thus made an attempt in its guidelines in the Federal Register and in its announcement of grants to superintendents to encourage LEAs to replace their Title I efforts with these PIP projects. This did not occur in the sites and could not be required, since the field test grants were awarded under the authority of Title III. Nevertheless, program continuation under Title I is a possibility only for projects serving a disadvantaged elementary or secondary level target population, thus, it remains a sensible criterion for choosing programs in the first place.

As more and more is known about the constraints that are likely to be placed on future applicants for or recipients of the PIPs by various sources (not just the federal sources), the more those constraints should be considered as program selection criteria. The acceptability of the packages based on exemplary programs and the ease of implementation will be affected by the perceived advantage of that program over other available alternatives, the compatibility of the program with district philosophy and contextual features, and a perceived lack of complexity in implementing that program.*

Identifying Essential Features to Package

In the description of the original PIP concept (Chapter 2), it was suggested that the strategy RMC used for deciding what features of each of the six programs to put in the PIP was a sensible strategy, considering the state of the art. It was clear that the "essentiality" of the features which were obvious or appeared to be important to the RMC team could not be established.

The fact that the strategy RMC used for identifying important features of an instructional program was sensible, does not mean that it was successful. Our knowledge is not such that we can tell how successfully they identified the essential features. Until we obtain achievement results as good as those demonstrated by the original programs, we will not know if the PIPs contained the essential elements. If we are able to obtain comparable results, we might assume that RMC has a successful strategy for identifying essential features but we will not necessarily show which are essential.

If these first field-test projects are not effective for students, we will not be able to decide whether in this case the essential features were not identified or whether they were not communicated. As Volume II thoroughly illustrates, many features described in detail were probably almost nonessential to the program or to helping personnel implement them. And some features that were left out or greatly underemphasized were judged crucial by the teachers implementing the program. If with a pretested and revised set of PIPs, projects do not prove effective this would most likely be due to our ignorance of what makes instructional programs work, not our ignorance about how to communicate this to others.

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*Rogers and Shoemaker (1971).

As Volume II suggests, a formal distinction between processes and outcomes should be used for capturing features of a program in future packaging attempts. In particular, if "essential features" is to mean anything at the present state of the art, it must mean the outcomes or the conditions that must exist for replication. Stating these outcomes is the closest one can come to stating the set of sufficient conditions for replication of effects. Formally, the distinction is a good one. It remains to be seen whether the features identified and communicated are sufficient.

Design for Communicating Program Features

It may well be that the most essential features of the exemplary projects were the minute-to-minute human interactions between a teacher who cared about a child's progress and expected him to succeed and the child who studied and retained the information and skills to make himself worthy of the teacher's respect. The PIPs did not contain descriptions of instructional sequences in these terms.

Even if RMC believed that the details of instructional interactions were the features essential to project effectiveness, they chose not to communicate them directly by describing the features in detail. The general communication principle used in the PIPs was to foster at the new site the conditions in which the effective elements of the instructional program would be recreated. RMC relied on the qualified instructional staff of the project to fill in the omitted "effective instructional components" within the antecedent conditions specified by the PIPs. This does not seem to have been entirely satisfactory. Although for the most part, educators on the receiving end of the PIPs, once they had studied the packages carefully, understood the steps required to install the programs, the project director did not have enough information about or "feeling for" the instructional program to be confident about training staff; and the teachers did not have enough information about what the instructional processes were. They experienced considerable insecurity for the first few months of operation.

Volume II discusses the many problems of these first six PIPs in organization for easy use and in ability to communicate certain program features well. Some specifications seem completely arbitrary and caused rather than resolved problems in the field-test sites. There were contradictions, ambiguities, and other errors in the first PIP materials. Volume II explores these problems and lists recommendations for revision; hence these will not be described here.

One important point remains: It is not enough to let knowledgeable people study the program, determine what features are relevant, and then design a method for communicating relevant features in whatever seems like a sensible manner. It is also absolutely essential to plan on a cycle of testing and revision. At the current state of the art, there is no way to know whether or not one has included and communicated the important features of a program without a tryout. This is almost a truism in the communication and educational product development fields. But its implications for a federal dissemination strategy involving the PIPs or other packaging devices should be considered carefully. The necessity of trials and revision (both for updating and for improving communication) has long-run implications that USOE should address if further packaging is planned. A total packaging dissemination strategy would have to include a definite mechanism for continuous field testing and revision.

Principles and Assumptions in the PIP Concept

The Three-Stage Model

The conception of project implementation as occurring in three stages--Selection/Adoption, Start-Up, Operations--fits very well as a description of the efforts at the PIP field-test project sites. These efforts organized themselves fairly neatly around the three different kinds of activities--getting the Title III PIP grant, mobilizing people and materiel, and conducting an instructional program--which the ASK and PIPs were designed to facilitate. Although the ASK was not used, the PIPs arrived late, and thus these three kinds of effort overlapped somewhat in time, there were definite distinctions between stages in terms of their purpose, the kind of personnel involved, and the roles played by the personnel.

The major person involved in the grant-getting (and in some sites, project selection) activity was generally a member of the district administrative staff with a title such as "Director of Compensatory Programs" or "Federal Program Coordinator"; in some cases the proposal-writer worked under the direction of an assistant superintendent-level person. The role this person played was that of representative of the district vis-à-vis the federal government. Upon receipt of the grant, the activities changed and so did the personnel for the most part. The purpose of the start-up period was to get the people, equipment, facilities, and materials ready to begin the instructional program. The project director, in most cases not the same person as the proposal writer, became the chief actor--orienting people to the project, hiring staff if the district coordinator had not already done so, ordering materials, obtaining facilities, holding training sessions, adapting PIP specifications to the local context and justifying this action to the government, and adapting the local practices to PIP specifications and justifying the adapation to local or state personnel.

The third stage was dominated by the instruction of children. Principals and teachers at the level of the individual schools and the project rooms became the chief actors in the implementation of a daily program for the benefit of the students. Toward the end of the operations period in the PIP field test, a new effort began which involved mobilization for continuation of the project. Application was made for renewal of the Title III grant (this time with project directors much more heavily involved), commitments were made to project staff, materials were ordered, and officials were notified of the continuing need for other resources.

In other studies of dissemination, the process is also divided into three stages. There is correspondence between these stages and the stages described in the PIP concept and noted in the field test. However, the nature of the product or practice being disseminated influences the nature and length of each stage. Most of the studies describe the spread of innovative practices in general, not specific, exemplary programs. For example, Rand has described a three-stage model of innovation in which the stages are termed "initiation," "implementation," and "incorporation."* Their study covered hundreds of innovative projects under several federal programs (ESEA Title III, Right-to-Read, Vocational Education, and Bilingual Education) and designated "change agent" programs because federal support was only to be "seed money" for starting projects.

Generally the local school districts took the initiative in deciding on the nature of the project to be installed, then implemented it with federal support, and were expected to take over support of the project when federal funds were withdrawn. For these reasons, Rand's initiation stage corresponds somewhat with RMC's selection/adoption stage but their implementation stage covers most of the PIP start-up and operations stages. The PIP, written to get a project launched and operating in a site, does not anticipate in any formal way the loss of "special project" status and the evolution of project existence or project practices into the "routine behavior of the district."

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*Berman and McLaughlin (1974).

The grant reapplication and project remobilization in the PIP field-test sites should probably be considered as part of ongoing program operations rather than as an institutionalization stage. It is different from Rand's institutionalization stage since federal rather than local funding support was expected for the second year, and the efforts were not aimed at incorporating the project into ongoing district-supported programs. Such a stage could be entered at some of the field-test sites for the 1976-77 school year, when Title III, Section 306 funding ends.

Dependence Among Stages

The dependence of each stage on outcomes of earlier stages was the PIP principle most clearly illustrated in the field test. For example, during project operations, nonproject teachers who sent some of their students to the project classrooms felt that they did not understand what these students experienced in those special classrooms, and that the project teachers were not involving them appropriately. These attitudes resulted in large part from the fact that the orientation activities in the start-up stage had not accomplished their purpose. Classroom teacher understanding, support, and cooperation had not been appropriately elicited in the orientation process or the student selection process. Most dramatic, however, was the dependence of start-up events on the outcomes of the selection/adoption stage.

Context Match

The principle of matching field-test site contextual conditions to those of the exemplary program is an important one not just for the packaging concept but for any method of disseminating projects in which fidelity of the practices at the new site to those of the exemplary program site is important.

Although this logical principal was incorporated in the original ASK-PIP concept, it was ignored--to some extent, necessarily--in assigning PIPs to sites for field testing. While it must be remembered that any PIP-specific conclusions should be viewed as tentative, given the small number of cases in question, we found, for each PIP in the field test, some contextual factors that seem to be necessary to project success. During the start-up stage, sometimes personnel with the right qualifications were unavailable, or the students available for the program were not like those for whom the program was designed. In some cases, administrative specifications in the PIP were antithetical to practices in the field-test district. Several contextual features have been shown to be important across PIPs. The establishment of the project director's autonomy and authority, for example, seemed to be dependent upon the project director's previous role in the district, the size of the district, the relationship between the project director and the author(s) of the grant application, and the flexibility of the district structure. In large LEAs, where the author of the grant application was a senior district official a number of levels above the project director in the district hierarchy, a project director who was known and respected by principals and teachers had little difficulty establishing his authority, provided that the central district staff supported his efforts. In small LEAs, which were in the majority, a project director who was known and respected was allowed autonomy and authority only if he was the author of the grant application or if the author ceased to be associated with the project once the grant was awarded. In those cases where the author of the grant application was the immediate supervisor of the project director, the project director was not able to establish his authority over project operations.

The availability of facilities and equipment is an obvious *sine qua non* of project success. However, since none of the LEAs was aware of the exact PIP requirements and none provided exact descriptions of available facilities or equipment in the grant application, context matching during this year's selection/adoption stage was not possible. The mismatches that did take place and their impact on project implementation were discussed in Chapter IV's description of start-up.

The importance of matching LEA location, size, or economic base to those of the originating site varied from PIP to PIP. In general, the location of the LEA played a small role in PIP implementation except in the case of R-3, where the curriculum materials developed at the exemplary program site were irrelevant to midwestern students.

The size of the LEA, in terms of population, was a factor for all PIPs except PTR, since most are not appropriate for very small districts. In the very small LEAs, the cost per student of PIP implementation was extremely high, since fewer students were served by the PIP project. One of the Catch-Up sites was so small that there were only a handful of students who were not participants. Only one of the LEAs that implemented Catch-Up was able to provide some half-time teachers as required; the location was a university town, and qualified staff who could afford to work half-time could be found among the wives of professors and students. In the other LEAs, qualified teachers simply could not afford to work half-time. In addition, many small LEAs did not have available staff with the appropriate PIP-specific qualifications, and it is unlikely that they would have been able to locate such staff within the district even if they had received their PIP in the spring. Perhaps the only PIP for which the square miles covered is an important factor is IRIT. Since students must be bused to the IRIT host school, that PIP could not be implemented to a large rural district where the distance from one school to the next would be prohibitive.

The type of student served by the PIP, in terms of socio-ethnic background, may or may not be a critical factor for any of the PIPs. However, RMC staff who had been to both the original HIT program and one of the field-test sites noted informally that curriculum materials which seemed appropriate at the exemplary site to assist bright black students compensate for nonstandard English dialect problems did not seem as appropriate to the reading problems of the low-achieving students in a small city with a fairly homogeneous white population. There were too few instances of both matching and mismatching on common dimensions to produce any generalizable conclusions.

Most of the start-up problems could be anticipated in revised programs and PIPs. It appears that in this wide variety of field-test sites, people were generally able to (or would have been able to, given adequate time) achieve the desired outcomes of the start-up stage and to implement the programs described in the PIPs.

A strong interpretation of context matching--in terms of geography or size or socioeconomic or ethnic characteristics of the LEA--does not seem necessary.

Probably the feature that would have made these programs incompatible with several of the districts in the field test--had federal funds not been offered--was their cost. But the field-test districts (other than those with the R-3 program) could have done what five original exemplary districts did: support the project with their Title I funds.

Only a few PIP requirements could not have been met if the appropriate amount of lead time could have been allowed and if the selection/adoption activities had proceeded as expected. In cases like the R-3 projects, where the curriculum materials developed at the exemplary program site contained themes irrelevant to students at field test sites and made implementation difficult, redesign of the PIPs can compensate for contextual mismatches. For the Catch-Up program requirement of teachers who are to be employed only half-time, some mechanism must be employed to ensure that consumer LEAs can adapt--if, indeed, that requirement is thought to be essential. The problem of identifying which contextual features are significant, or which it is important to match, is as difficult as (and is related to) the "essential features" problem discussed above. At what level of detail are we talking about matching? If for example, we intend to match hierarchical arrangements in the two districts to the point of specific roles played and personalities involved, no two districts will ever match.* However, if one of the criteria for selection of the exemplary programs for packaging continues to be "replicability," there should be very few odd contextual requirements. The requirements of the federal offices involved in monitoring the projects can be a great deal more difficult to meet in certain contexts.

Certain attitudinal characteristics of adopters and their educational philosophies seem more important than the physical location or organizational hierarchy of the LEA. The program described in the package should appeal to the people who will be involved in implementing it. The management strategy should suit the adopter LEA and the potential project director. And if there are good relations between school management and local teacher's associations and community groups, then programs such as selected for the current six PIPs should be amenable to implementation. In one district participating in the PIP field test, administrators arranged legitimate ways to give the project director real authority in recruiting and hiring, even when district regulations required that school principals be ultimately responsible for teaching staff. In another district, where the PIP turned out not to describe the flexible, adaptable program LEA administrators had hoped for, the project director's role was completely undetermined and the project was never properly implemented.

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*And if the matching of the two school districts at that level was essential in causing student achievement gains, then the replication principle or any mechanism based on exact replication for effectiveness is doomed to failure.

Although use of the ASK was intended to bring the right PIP and site together, in order to assure an appropriate predisposition on the part of a potential adopter, it is suggested that in addition perhaps the original developer or some broker is necessary.

For example, R-3 was implemented best in school districts where innovation was not alien and where teachers knew of team teaching and were more sophisticated in the latest educational theories. One does not know whether the site where teachers found the R-3 instructional program widely different from their usual teaching practices would have selected this PIP or not. It may be important for future dissemination to have a monitor of the match in order to insure against failures of implementation.

Management Orientation Principle

The management orientation of the PIPs is their best and most successful feature. While the existing PIPs need much revision (see Volume II), the principle of a management package for project installation is sound. In the field-test sites, PIPs enabled project directors to get a project into operation in a few weeks. Since the PIPs specified the logically necessary activities for getting resources together, the project director used them for information and for support and might have made more use of the management calendars had they not been so out of phase by the time the PIPs arrived. Project directors, armed with PIP suggestions and information, created visible projects within their school districts. This efficiency in project installation and the visibility or "projectness" should appeal to potential future adopters. Many Title I-funded activities do not seem well organized and do not achieve visibility as projects.

The PIP classroom management materials for the instructional staff were also a sound idea. Teachers relied on the packages for guidance in setting up the classroom program. But management materials were not sufficient to give teachers and aides the information or support they needed in implementing the program. It became clear during the operations stage, and should have been clear from our observations of the inadequate pre-service training sessions, that there was not enough information about teaching processes or the details of the instructional program. A strict management orientation at the instructional program level is not adequate for replication of the original curriculum and teaching-learning episodes.

Staff Selection Principle

Another sound principle of the PIP concept is that good project directors and teachers must be selected for the project; use of the PIP cannot make a mediocre staff into a good one.

RMC assumed that project directors would be similar to the directors who had created exemplary programs in the original sites; they would be school district administrators with previous experience in working with disadvantaged students and in teaching reading (perhaps even with the techniques described in the PIP). In a number of field-test sites, the designated project director had not had previous administrative experience or as much teaching expertise as the original project directors. However, most of them, with district support for the Title III effort and the information supplied by the PIP, were excellent leaders and project organizers. While three PIP field-test project directors were not adequate to the role, it appears that in every district, there are good potential project directors who can rise to the occasion. For PIP project directorship, it is not necessary to maintain an extreme position on the staff selection principle.

This does not mean that the PIPs are so comprehensive, detailed, and well ordered that an automaton would be an ideal project director. On the contrary, a project director must be creative in carrying out the necessary tasks, eliciting support from district, school, and community groups, and training the staff through the year. The current PIPs erred in having a few unnecessarily arbitary specifications that caused problems for reasonable project directors. But PIP specifications can be revised so that desired resources, staff, and other outcomes are well described, and so that methods, including alternative tactics, for achieving those outcomes are merely suggested or recommended.

As for teachers, it appears from the PIP field test that careful staff selection is necessary. Projects where teachers were selected from those left over at the beginning of the school year were more poorly implemented than those where excellent teachers were lured away from their regular positions for the special project assignment. However, excellent staff is not a sufficient condition for a well implemented instructional program. More information about the nature of instruction should be provided in the package than was included in at least five of the six PIPs. If implementing a successful program requires doing anything different from what the teachers would do in their regular assignments, then even excellent teachers need support for that change in the way of information and training. The staff selection principle, like the management principle, is necessary but not sufficient.

Autonomy

In Chapter IV we discussed the number and kind of contacts made by field-test sites to original sites, government offices, and evaluators. What is pertinent to the question of autonomy is the amount of "how to" assistance that is really necessary to supplement the packages.

The answer depends entirely on the intended strategy for disseminating the packages, including the degree to which adaptation of the project is permitted. It was quite clear from the contact reports that the need to request assistance was greatly stimulated by the demand that sites follow the PIP specifications to the letter and replicate the original program exactly. Had the field-test sites been under no constraint to replicate, we do not know how closely they would have adhered to PIP specifications or how they would have fared, but it seems fairly certain that they would not have had to "clear" all modifications, adaptations, or deviations with several other parties. An improved PIP in addition to the encouragement for the field-test staff to solve problems in their own site would have greatly reduced the amount of contacts required. A very small number of contacts with the original sites was necessary for purposes of understanding how to implement the procedures that were specified. And these useful contacts were made via telephone when a specific set of questions arose.

The R-3 package was weakest in this respect. Not only did it have certain built-in requirements for assistance, since the curriculum materials were neither commercially available nor included in the package, but also, the instructional program and coordination of techniques, materials, themes, and staff were not well described. The few outside consultants called on to give inservice training (e.g., on gaming/simulation techniques) were unsatisfactory since their advice was not congruent with the PIP.

For R-3 it seems possible to improve the package so that materials are included or information is given about how teachers can create appropriate materials of their own. The working relationships of the staff, the integration of the curriculum, and the use of contracts and gaming and simulation techniques could also be better described. To implement R-3 projects, it may take longer periods of time with staff working together in addition to more PIP revisions.

For all the other PIPs, it seems quite likely that revisions can easily reduce the relatively small amount of "how to" assistance that seemed necessary. This is not to say that in any future use of PIPs, district staff will not seek or use assistance. One must consider that the current implementation was done under a grant agreement with the government. Therefore, implementing the particular project as specified in the PIP--without outside assistance if possible--was a condition the district staff accepted under the grant agreement. They did not call on the original developer or staffs at other field-test sites that were implementing the same program as much as they would have without the governmental constraint.

It seems safe to conclude, from the nature of the phone calls and visits between sites, that under another set of circumstances--say, merely receiving the PIP box "compliments of the federal government" without any funds or regulations attached--the first response of the staff in the receiving school district would be to phone an educator who had implemented the project or used the package before, and to make an appointment to see the program in operation. The question that arises as far as the future of a packaging mechanism is concerned is: "What will be the cost of technical assistance to the federal government?" This too depends on the dissemination strategy proposed to support the use of packages. We can imagine anything from merely handing out free PIPs without further support to including PIPs in the National Diffusion Network (should it be continued) where adopters of PIPs could be eligible for basic program support under Title I and where they could visit or be visited by originating project staff from some developer sites at government expense. Since packages can be designed so that the programs can be implemented with little "how to" assistance and since adopters have enough desire to contact original sites on their own, it would seem cost/effective for the government not to pay for technical assistance. It would be sufficient merely not to place any constraints on it.

We cannot claim, on the basis of any data we collected, to know how well these PIPs or similar packages would do without grants from and direct accountability to the U.S. Government. But we believe that for enabling project implementation, packages would be at least as informative to new sites and probably more so than other forms of communication; for example, a series of technical assistance or in-service visits back and forth Packages would probably also be less expensive than such other methods in the long run* even if we assume a "revisions" mechanism must be included in the packaging concept.

Replication Principle

To the level of detail our measurements went during the first year of the PIP field test, we can say that in nearly every field-test site, the projects were implemented according to PIP specifications. We cannot say yet whether or not the features of curriculum and instruction that are essential for program effectiveness were communicated via PIPs. According to the replication principle, if achievement outcomes at the end of the second year of the PIP field test duplicate the outcomes of the original programs, we can assume that the sufficient conditions were replicated. This would mean that RMC's management packaging strategy--installing the antecedent conditions in the belief that the appropriate instructional conditions will be recreated--is entirely satisfactory. The fact that USOE and RMC relied on the replication principle in the packaging concept had consequences for the way in which the field test was administered. Projects were monitored for their adherence to PIP specifications and constrained against "deviations" and "modifications." "Replication" was viewed an alternative to "adaptation"† as a way of implementing an innovative program in the district. But to apply the meaning of the word "replication" exclusively to packages as a device for getting a program implemented in a new school district is to place a particular condition on this means of communicating information--a condition that is not applied to other means of helping school districts desiring to improve their educational programs.

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*As the cost of development was amortized across time and users.

†It should be noted that the RAND Study of Change Agent Programs (Berman and McLaughlin 1975) reported on the success of an implementation process called "mutual adaptation."

For the deviations from the practices at the exemplary program site that an adopter site finds necessary in order to comply with state laws or local desegregation orders, there is nothing that either a package or a team of experts and trainers can do to ensure replication of the conditions that originally existed. For those features of the exemplary program that a new site could virtually duplicate, a package can be written so that the reason for doing so is clear and convincing. Similarly, a developer could probably say something to motivate a new site to copy the old. For those cases where an adopter does not believe that the practices of the original program are appropriate or for some other reason does not wish to duplicate a certain part of the program, one has to ask whether it makes sense to force an LEA to carry out the project against the will or the best judgment of the staff. Whether the program is communicated by a package or by staff who have previously implemented it, forced compliance does not make sense. Presumably, if we could guarantee that perfect compliance would guarantee benefits to the students, we would have some justification for exerting sanctions. But as we made clear in the section on "essential features," we have no evidence on which to make such a guarantee. In fact, it seems highly unlikely that a school district in which the staff were forced "to replicate" would provide the same conditions that led to effectiveness in the original site.

Implications for USOE Packaging Effort

Shoud USOE continue to disseminate exemplary programs via PIPs or a similar packaging mechanism? That should depend partly on what alternative mechanisms are available. Since number of actual adoptions/implementations is the criterion of success for their other dissemination efforts, USOE should consider carefully before rejecting only the packaging mechanism if achievement test outcomes do not meet the criteria of effectiveness. The ASK-PIP concept, revised as suggested in this report, should be able to communicate information about project implementation at least as well as any alternative mechanisms available. But a packaging mechanism, by itself, cannot ensure project replication.

Packages, by themselves, comprise neither the dissemination agent nor the target audience, though they must be designed to fit into a strategy comprising both these other necessary elements. They are not in themselves a strategy for diffusion of exemplary projects to new sites since they neither transport themselves nor contain the funds necessary to implement. They do not limit their audience to only suitable places nor do they enforce adherence (if that is desired) once they are in use. A package can include enough rationale to make some people want to duplicate a program or to inform them of the possible consequences of modifications in use of any part of the program, but at bottom, the package contains only information.

Packages can be, especially in the long run, a less expensive way to communicate information to new sites than sending teams of experts to help with installation and operation. However, we believe that as USOE reviews the various dissemination strategies now being tried out, it will become apparent that these strategies, rather than being alternatives, represent parts of a total dissemination strategy. As an illustration, we would point to the fact that contracts have been let to "package" the implementation strategies and program specifications of Follow Through sponsors (who have given enormous amounts of assistance to LEAs since 1968). Those developer-demonstrator projects in the National Diffusion Network which are in much demand are already considering how to make their training workshops and other assistance visits more efficient by "packaging" awareness materials and some of their goals and implementation tactics.

The developer of the Right-to-Read packages, on the other hand, prepared a report discussing the roles the dissemination agent will have to play if these packages are to be effective as dissemination devices. PIP revision recommendations (Volume II) already include a new and separate package for a dissemination agent who may eventually be one and the same person as the state facilitator in the National Diffusion Network. The several mechamisms already in existence at USOE are growing together, taking on aspects of one another. In light of our review of the PIP mechanism, this seems appropriate.

Appendix A

PROJECT INFORMATION PACKAGES FIELD TEST EVALUATION INSTRUCTIONAL STAFF QUESTIONNAIRE

The technical appendix for the Instructional Staff Questionnaire is comprised of two parts: 1) instructions for reading the data tables, and 2) the data itself.

Instructions for Reading Tables

T = Total number of ISQs returned = 431

T_1 = Total number of ISQs returned by project staff = 187

T_2 = Total number of ISQs returned by nonproject staff = 244

N_t = Total number of ISQs returned per PIP by each type of respondent (e.g., project or nonproject instructional staff)

	Catch-Up		Conquest		HIT	
	Project	Nonproject	Project	Nonproject	Project	Nonproject
N_t =	25	45	41	56	21	31

IRIT		PTR		R-3	
Project	Nonproject	Project	Nonproject	Project	Nonproject
9	37	33	32	58	43

N = Total number of staff who actually responded to a question, N does not include uncodeable or bad data and is broken down appropriately for each type of data display (e.g., univariate, univariate by project and nonproject staff, by PIP, by PIP and type of staff).

1. Univariate displays include the total number of ISQ respondents (T). Univariate displays by project and nonproject instructional staff include the total number of ISQ respondents for each type of staff (T_1 and T_2). Displays by PIP include the total number of respondents per PIP ($N_{t1} + N_{t2}$).
2. To find the percent responding to each item use N and the appropriate number of possible respondents for the item in calculations [e.g., in a univariate display the equation would be $\% = N(100)/T$].
3. To find the percentage of response type to each item use the appropriate total number of respondents in calculations [e.g., data displayed by PIP and by project staff would use the indicated N_t above; the equation would be $\% = N(100)/Nt_1$].
4. Data displayed for the open-ended questions represent the three most frequent responses made by all ISQ respondents.

INSTRUCTIONS: MEMBERS OF PIP PROJECT INSTRUCTIONAL STAFF PLEASE RESPOND TO QUESTIONS 1-11.
NON-PROJECT INSTRUCTIONAL STAFF PLEASE BEGIN AT QUESTION 12.

PLEASE RESPOND TO ALL OTHER QUESTIONS UNLESS OTHERWISE DIRECTED. ALL ANSWERS WILL BE TREATED IN STRICTEST CONFIDENCE.

1. What is your professional title in this project?

	Catch-Up Project	Conquest Project	HIT Project	IRIT Project	PTR Project	R-3 Project
Supervising (head) clinicians	0	4	0	0	0	0
Clinician	0	12	1	0	0	0
Intern	0	6	0	0	0	0
Aide, paraprofessional aide, teacher's aide	7	7	14	0	6	28
Tutor, tutor aide	0	0	0	0	22	0
Lead teacher	3	0	0	1	0	0
Teacher, project teacher, teacher including project name (e.g., Catch-Up, Conquest, HIT, IRIT, PTR, R-3)	14	2	3	6	0	24
Reading teacher (include remedial)	0	9	2	0	0	3
Math teacher	0	0	1	0	0	2
Social Studies teacher	0	0	0	0	0	1
Vocabulary and comprehension teacher	0	0	0	1	0	0
Other teacher	0	1	0	0	0	0
	N = 24	N = 41	N = 21	N = 8	N = 28	N = 58

2. What subjects do you teach? (CHECK ALL THAT APPLY)

	Catch-Up Project		Conquest Project		HIT Project		IRIT Project		PTR Project		R-3 Project	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Reading	24	1	39	2	13	8	9	0	31	0	22	36
Arithmetic	22	3	0	41	9	12	0	9	0	31	20	38
Social studies	0	25	0	41	0	21	0	9	0	31	20	38

3. Approximately how many students do you teach?

Number Students	Catch-Up Project	Conquest Project	HIT Project	IRIT Project	PTR Project	R-3 Project
1-10	5	1	0	0	0	0
11-20	13	2	0	0	30	0
21-30	7	10	0	0	0	1
31-40	0	9	0	0	0	0
41-50	0	5	1	8	0	0
51-60	0	2	2	0	0	1
61-70	0	3	3	0	0	5
71-80	0	2	2	0	0	10
81-90	0	2	5	0	0	5
91-100	0	4	4	0	1	32
	N = 25	N = 40	N = 17	N = 8	N = 31	N = 54

4. What grade levels do you work with in the project? (CHECK ALL THAT APPLY)

	Catch-Up Project		Conquest Project		HIT Project		IRIT Project		PTR Project		R-3 Project	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
A. Grade 1	15	10	23	18	0	21	0	9	32	0	1	57
B. Grade 2	17	8	33	8	0	21	0	9	0	32	1	57
C. Grade 3	17	8	34	7	0	21	9	0	0	32	1	57
D. Grade 4	21	4	35	6	0	21	9	0	1	31	3	55
E. Grade 5	19	6	27	14	0	21	0	9	0	32	3	55
F. Grade 6	10	15	19	22	16	5	0	9	0	32	3	55
G. Grade 7	2	23	4	37	16	5	0	9	0	32	58	0
H. Grade 8	2	23	1	40	15	6	0	9	0	32	2	56
I. Grade 9	0	25	0	41	10	11	0	9	0	32	0	58

5. Approximately how many hours per day do you spend in instructional activities?

Hrs/Day	Catch-Up Project	Conquest Project	HIT Project	IRIT Project	PTR Project	R-3 Project
1	0	0	0	0	0	0
2	2	0	0	0	0	1
3	14	6	9	9	12	2
4	8	7	5	0	1	22
5	0	15	4	0	9	20
6	0	11	2	0	6	4
7	0	1	1	0	2	4
8	0	0	0	0	2	4
	N = 24	N = 40	N = 21	N = 9	N = 32	N = 57

6. Approximately how many hours per day do you spend on planning?

Hrs/Day	Catch-Up Project	Conquest Project	HIT Project	IRIT Project	PTR Project	R-3 Project
0	2	1	2	0	1	0
1	5	13	6	0	13	16
2	14	14	6	0	18	28
3	1	8	6	2	0	9
4	1	3	1	2	0	0
5	0	1	0	3	0	2
6	0	0	0	1	0	0
7	1	0	0	0	0	0
8	0	0	0	1	0	1
	N = 24	N = 40	N = 21	N = 9	N = 32	N = 56

7. Below is a list of areas in which you may have received training since you became involved in the PIP project. Using the following scale, please indicate in Column 1 the extent of training you have received in each of these areas:

EXTENT
1 - a great deal of training
2 - some training
3 - no training

For each area to which you have assigned a "1" or "2" in Column 1, use the following scales to indicate the adequacy of this training (Column 2) and its relevance to your present assignment (Column 3).

ADEQUACY
1 - very adequate
2 - somewhat adequate; additional training would be helpful
3 - not at all adequate; additional training is necessary

RELEVANCE
1 - on target; very relevant
2 - somewhat relevant
3 - off target; not at all relevant

a) Use of specific curriculum materials

	Catch-Up Project				Conquest Project				HIT Project				IRIT Project				PTR Project				R-3 Project			
	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N
A. Extent of Training	3	21	0	24	9	31	0	40	6	10	1	17	1	5	2	8	16	2	1	19	5	35	12	52
B. Adequacy of Training	8	14	3	25	16	24	0	40	4	9	1	14	5	2	0	7	16	3	0	19	5	35	2	42
C. Relevance of Training	9	14	1	24	22	14	0	36	7	6	0	13	6	0	0	6	18	1	0	19	10	30	0	40

b) Use of special equipment

	Catch-Up Project				Conquest Project				HIT Project				IRIT Project				PTR Project				R-3 Project			
	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N
A. Extent of Training	2	19	3	24	13	27	1	41	1	5	8	14	0	7	1	8	7	8	3	18	5	28	19	52
B. Adequacy of Training	11	11	0	22	28	10	0	38	4	2	0	6	8	0	0	8	11	5	0	16	8	25	1	34
C. Relevance of Training	11	9	1	21	28	7	0	35	1	4	0	5	7	0	0	7	13	2	0	15	14	17	0	31

c) Use and interpretation of diagnostic tests

	Catch-Up Project				Conquest Project				HIT Project				IRIT Project				PTR Project				R-3 Project			
	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N
A. Extent of Training	3	16	5	24	6	30	4	40	5	7	5	17	0	6	2	8	9	2	4	15	2	21	27	50
B. Adequacy of Training	8	11	1	20	15	20	1	36	2	7	0	9	2	5	0	7	7	3	1	11	4	18	3	25
C. Relevance of Training	10	9	0	19	19	13	0	32	5	4	0	9	4	2	5	6	9	1	0	10	6	17	0	23

d) Classroom management skills, including working with paraprofessional aides and tutors

	Catch-Up Project				Conquest Project				HIT Project				IRIT Project				PTR Project				R-3 Project			
	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N
A. Extent of Training	1	8	14	23	8	24	6	38	4	10	1	15	0	0	6	6	9	6	2	17	9	21	21	51
B. Adequacy of Training	5	4	1	10	12	19	1	32	6	7	1	14	0	0	0	0	12	2	0	14	9	21	0	30
C. Relevance of Training	6	3	0	9	17	12	1	30	8	4	0	12	0	0	0	0	11	2	0	13	15	16	0	31

e) Working with small groups of children

	Catch-Up Project				Conquest Project				HIT Project				IRIT Project				PTR Project				R-3 Project			
	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N
A. Extent of Training	3	9	11	23	9	24	6	39	6	4	5	15	0	1	5	6	9	4	4	17	6	28	18	52
B. Adequacy of Training	5	8	0	13	19	11	0	30	7	3	0	10	1	0	0	1	11	1	0	12	10	24	0	34
C. Relevance of Training	7	5	0	12	20	9	0	29	7	1	0	8	1	0	0	1	10	1	0	11	16	19	0	35

f) Working with children individually

	Catch-Up Project				Conquest Project				HIT Project				IRIT Project				PTR Project				R-3 Project			
	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N
A. Extent of Training	3	10	11	24	10	25	4	39	6	4	6	16	0	1	5	6	16	3	1	20	9	24	19	52
B. Adequacy of Training	5	9	0	14	18	13	1	32	9	1	0	10	1	0	0	1	12	4	0	16	9	23	1	33
C. Relevance of Training	9	4	0	13	23	8	0	31	7	0	0	7	1	0	0	1	14	2	0	16	15	18	1	34

g) Selection of curriculum materials to suit needs of the individual child

	Catch-Up				Conquest				HIT				IRIT				PTR				R-3			
	Project				Project				Project				Project				Project				Project			
	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N
A. Extent of Training	2	15	7	24	7	26	6	39	4	7	5	16	0	3	3	6	13	4	1	18	4	25	23	52
B. Adequacy of Training	6	11	1	18	12	15	4	31	4	5	1	10	1	2	0	3	11	4	0	15	7	23	0	30
C. Relevance of Training	9	8	0	17	19	12	0	31	4	3	0	7	2	1	0	3	13	2	0	15	11	18	0	29

h) Arrangement of the instructional environment (e.g., placement of furniture, displays of instructional materials and student work)

	Catch-Up				Conquest				HIT				IRIT				PTR				R-3			
	Project				Project				Project				Project				Project				Project			
	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N
A. Extent of Training	3	10	11	24	3	20	15	38	5	4	5	14	0	0	6	6	10	8	2	20	7	23	23	53
B. Adequacy of Training	5	8	1	14	10	13	0	23	7	2	0	9	0	0	0	0	12	3	0	15	9	20	1	30
C. Relevance of Training	7	5	1	13	9	12	0	21	5	3	0	8	0	0	0	0	11	3	0	14	9	21	0	30

i) Use of rewards to motivate student learning

	Catch-Up Project				Conquest Project				HIT Project				IRIT Project				PTR Project				R-3 Project			
	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N
A. Extent of Training	1	15	8	24	6	20	12	38	8	5	2	15	0	1	5	6	11	2	3	16	5	21	27	53
B. Adequacy of Training	4	12	1	17	11	14	0	25	9	4	0	13	1	0	0	1	11	1	0	12	5	17	4	26
C. Relevance of Training	6	10	0	16	13	12	1	26	9	2	0	11	1	0	0	1	11	1	0	12	9	16	1	26

j) Use of gaming and simulation techniques

	Catch-Up Project				Conquest Project				HIT Project				IRIT Project				PTR Project				R-3 Project			
	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N
A. Extent of Training	1	11	11	23	5	28	5	38	9	2	0	11	0	2	4	6	10	5	2	17	7	37	8	52
B. Adequacy of Training	5	8	0	13	13	19	0	32	3	7	6	16	2	0	0	2	10	2	0	12	3	35	7	45
C. Relevance of Training	5	7	0	12	17	13	0	30	4	5	0	9	2	0	0	2	10	2	0	12	9	32	1	42

k) Strategies for instruction in basic skill areas

	Catch-Up Project				Conquest Project				HIT Project				IRIT Project				PTR Project				R-3 Project			
	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N
A. Extent of Training	4	16	4	24	11	22	5	38	3	6	6	15	0	3	3	6	13	4	0	17	4	27	22	53
B. Adequacy of Training	7	14	0	21	11	19	2	32	5	5	1	11	2	1	0	3	10	4	0	14	7	21	3	31
C. Relevance of Training	10	9	1	20	18	13	0	31	6	3	0	9	2	1	0	3	12	2	0	14	11	18	1	30

l) Maintaining discipline and control in the classroom

	Catch-Up Project				Conquest Project				HIT Project				IRIT Project				PTR Project				R-3 Project			
	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N
A. Extent of Training	3	7	14	24	7	21	11	39	4	6	5	15	0	0	6	6	10	3	5	18	5	24	24	53
B. Adequacy of Training	5	6	0	11	9	16	0	25	7	3	0	10	0	0	0	0	10	3	0	13	7	18	3	28
C. Relevance of Training	5	5	0	10	15	9	0	24	7	2	0	9	0	0	0	0	12	1	0	13	12	15	1	28

m) Involvement of parents in the education of their children

	Catch-Up Project				Conquest Project				HIT Project				IRIT Project				PTR Project				R-3 Project			
	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N
A. Extent of Training	1	12	10	23	0	23	16	39	1	4	10	15	0	2	5	7	0	10	8	18	5	22	22	52
B. Adequacy of Training	4	10	0	14	5	18	0	23	2	4	1	7	2	0	0	2	0	10	0	10	6	23	2	31
C. Relevance of Training	4	8	0	12	13	10	0	23	3	2	0	5	2	0	0	2	2	7	0	9	13	15	1	29

8. Approximately what proportion of this training was a direct result of your participation in the PIP project?

	Catch-Up Project	Conquest Project	HIT Project	IRIT Project	PTR Project	R-3 Project
All	13	11	7	3	13	13
Most	6	13	8	1	5	17
Some	4	15	5	3	4	19
Little	2	1	1	1	0	4
None	0	0	0	0	2	3
	N = 25	N = 40	N = 21	N = 8	N = 24	N = 56

9. On the average, how often do you meet with other project staff for planning purposes and/or inservice training? (CHECK ONE)

	Catch-Up Project	Conquest Project	HIT Project	IRIT Project	PTR Project	R-3 Project
Once a day	5	14	0	6	0	19
Once a week	5	17	4	0	4	11
Twice a month	4	4	4	1	15	5
Once a month	10	1	8	0	10	5
Once every two months	0	0	1	0	1	3
	N = 24	N = 36	N = 17	N = 7	N = 30	N = 43

10. Has the frequency of planning and training meetings increased or decreased since the start of the school year? (CHECK ONE)

	Catch-Up Project	Conquest Project	HIT Project	IRIT Project	PTR Project	R-3 Project
Increased a great deal	0	6	3	0	9	7
Increased somewhat	6	4	4	3	3	13
Remained about the same	11	27	2	4	16	22
Decreased somewhat	6	3	8	1	1	14
Decreased a great deal	2	0	3	1	0	1
	N = 25	N = 40	N = 20	N = 9	N = 29	N = 57

11. How often do the groups or individuals listed below attend project planning and training meetings. Use the following scale:

1 - always or most of the time
2 - some of the time
3 - never

	Catch-Up Project				Conquest Project				HIT Project				IRIT Project				PTR Project				R-3 Project			
	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N
A. PIP project instructional aides	13	11	0	24	17	20	3	40	19	2	0	21	2	0	3	5	26	4	0	30	50	6	1	57
B. Project director	19	5	0	24	38	1	0	39	19	1	0	20	3	6	0	9	15	15	0	30	49	8	0	57
C. Principals at schools in the project	3	9	13	25	5	23	11	39	5	13	2	20	0	5	4	9	5	14	9	28	10	31	15	56
D. Nonproject teachers	0	6	18	24	1	6	32	39	0	6	13	19	1	2	6	9	5	4	18	27	1	20	36	57
E. School district staff	0	11	12	23	5	21	13	39	1	7	11	19	1	3	5	9	9	7	11	27	4	9	44	57
F. Adult or student tutors participating in the project	1	2	19	22	3	6	27	36	0	7	12	19	1	1	6	8	13	3	11	27	4	14	37	55
G. Parents of students in the project	0	4	21	25	1	10	28	39	0	7	13	20	1	2	6	9	1	9	20	30	0	13	43	56

NON-PROJECT INSTRUCTIONAL STAFF PLEASE BEGIN AT QUESTION 12.

PIP PROJECT STAFF PLEASE GO ON TO QUESTION 16.

12. Approximately how many students do you teach?

Number Students	Catch-Up	Conquest	HIT	IRIT	PTR	R-3
	Nonproject	Nonproject	Nonproject	Nonproject	Nonproject	Nonproject
1-10	0	2	0	0	1	0
11-20	7	4	0	2	0	1
21-30	17	21	2	24	17	0
31-40	7	11	0	6	0	0
41-50	0	1	0	1	1	0
51-60	0	0	0	0	4	2
61-70	0	0	1	1	0	1
71-80	2	2	1	0	1	1
81-90	2	0	1	0	5	2
91-100	10	11	25	1	1	34
	N = 45	N = 52	N = 30	N = 35	N = 30	N = 41

13. About how many of these students currently participate in the PIP project? (CHECK ONE)

	Catch-Up	Conquest	HIT	IRIT	PTR	R-3
	Nonproject	Nonproject	Nonproject	Nonproject	Nonproject	Nonproject
All	0	1	0	0	6	12
Most	2	3	6	1	5	7
About half	11	7	8	3	4	13
A few	31	42	10	28	12	7
None	1	1	5	3	3	1
	N = 45	N = 54	N = 29	N = 35	N = 30	N = 40

14. How often do students leave your classroom to participate in PIP-related activities? (CHECK ONE)

	Catch-Up	Conquest	HIT	IRIT	PTR	R-3
	Nonproject	Nonproject	Nonproject	Nonproject	Nonproject	Nonproject
Every day	41	36	5	32	22	2
Almost every day	2	12	6	0	2	0
Once or twice a week	0	2	3	0	1	0
Occasionally	0	2	5	0	1	21
Never	2	2	11	2	4	18
	N = 45	N = 54	N = 30	N = 34	N = 30	N = 41

15. Have you attended any planning or training meetings held for PIP project instructional staff?

	Catch-Up	Conquest	HIT	IRIT	PTR	R-3
	Nonproject	Nonproject	Nonproject	Nonproject	Nonproject	Nonproject
Yes, frequently	1	0	1	0	6	5
Yes, occasionally	7	6	6	11	11	11
No	36	48	24	24	13	25
	N = 44	N = 54	N = 31	N = 35	N = 30	N = 41

THE REMAINING QUESTIONS ARE FOR BOTH PIP AND NON-PIP INSTRUCTIONAL STAFF.

16. Which of the following best describes the structure or organization in your school? (CHECK ONE)

	Catch-Up		Conquest		HIT		IRIT		PTR		R-3	
	Project	Nonproject	Project	Nonproject	Project	Nonproject	Project	Nonproject	Project	Nonproject	Project	Nonproject
A. Open Classrooms	3	0	3	11	0	1	2	0	8	6	6	1
B. Ungraded Classrooms	0	1	1	4	3	2	0	10	1	0	1	0
C. Conventional Classrooms	13	23	18	27	5	9	3	13	4	6	17	21
D. Departmentalized Instruction	4	6	5	1	9	16	1	1	16	12	21	14
	N = 20	N = 30	N = 27	N = 43	N = 17	N = 29	N = 6	N = 24	N = 29	N = 24	N = 45	N = 36

17. Approximately when did you first hear about the PIP project?

	Catch-Up		Conquest		HIT		IRIT		PTR		R-3	
Month	Project	Nonproject	Project	Nonproject	Project	Nonproject	Project	Nonproject	Project	Nonproject	Project	Nonproject
1	0	1	1	0	0	0	0	0	2	3	0	1
2	0	0	0	0	0	0	0	0	2	0	1	0
3	0	2	0	0	0	0	0	0	0	0	1	0
4	0	2	0	0	0	0	0	0	1	0	0	1
5	2	3	1	1	0	0	0	2	0	1	0	3
6	2	2	3	2	2	3	3	2	0	0	2	0
7	6	3	14	0	6	1	1	1	1	0	10	3
8	9	14	9	7	8	4	5	7	16	8	30	21
9	6	15	12	38	4	20	0	14	6	6	7	14
10	0	2	1	5	0	2	0	8	1	9	2	0
11	0	0	0	2	0	0	0	1	0	0	2	0
12	0	0	0	0	0	0	0	0	2	2	2	0
	N = 25	N = 44	N = 41	N = 55	N = 20	N = 30	N = 9	N = 35	N = 31	N = 29	N = 57	N = 43
Year												
74	24	42	39	52	18	30	9	35	25	27	52	41
75	0	1	1	3	2	0	0	1	6	2	3	1
	N = 24	N = 43	N = 40	N = 55	N = 20	N = 30	N = 9	N = 36	N = 31	N = 29	N = 55	N = 42

18. Was this (CHECK ONE)

	Catch-Up		Conquest		HIT		IRIT		PTR		R-3	
	Project	Nonproject	Project	Nonproject	Project	Nonproject	Project	Nonproject	Project	Nonproject	Project	Nonproject
Prior to submission of the grant application	0	4	1	0	2	1	0	0	0	1	4	0
Following submission of the application but prior to notification of the award	4	7	0	1	1	0	0	3	3	1	4	2
Soon after notification of the award	8	12	19	4	12	4	8	12	0	4	17	11
During the early planning stages	6	7	7	9	1	5	0	8	15	5	14	9
After the project was underway	4	11	7	27	3	16	0	5	4	7	14	14
Do not know	0	0	0	0	0	0	0	0	0	0	0	0
	N = 22	N = 41	N = 34	N = 41	N = 19	N = 26	N = 8	N = 28	N = 22	N = 18	N = 53	N = 36

19. In general, how well do you understand the following aspects of the PIP project in your school?

	Catch-Up		Conquest		HIT		IRIT		PTR		R-3	
	Project	Nonproject	Project	Nonproject	Project	Nonproject	Project	Nonproject	Project	Nonproject	Project	Nonproject
A. Goals and objectives of the project												
Very Well	20	10	25	12	18	9	7	10	22	13	29	13
Well	2	18	15	18	1	9	2	12	3	7	20	10
Somewhat	2	14	1	17	1	10	0	9	1	7	5	13
Very little	1	3	0	4	0	1	0	2	0	1	2	5
Not at all	0	0	0	4	0	1	0	3	2	3	0	2
	N = 25	N = 45	N = 41	N = 55	N = 20	N = 30	N = 9	N = 36	N = 28	N = 31	N = 56	N = 43
B. Organization and management of the project												
Very well	12	3	19	9	15	6	6	7	16	8	18	6
Well	8	14	18	7	5	8	3	6	4	9	16	9
Somewhat	4	20	3	14	0	8	0	12	3	6	15	14
Very little	1	8	1	13	0	4	0	6	2	3	4	9
Not at all	0	0	0	12	0	4	0	5	2	5	3	5
	N = 25	N = 45	N = 41	N = 55	N = 20	N = 30	N = 9	N = 36	N = 27	N = 31	N = 56	N = 43
C. Instructional techniques used in the project												
Very well	16	7	24	8	16	6	6	4	22	11	22	1
Well	6	13	10	14	3	8	2	11	4	9	19	10
Somewhat	1	18	7	13	0	6	1	10	0	6	15	16
Very little	2	7	0	10	1	6	0	6	0	1	0	10
Not at all	0	0	0	9	0	3	0	5	2	4	0	6
	N = 25	N = 45	N = 41	N = 54	N = 20	N = 29	N = 9	N = 36	N = 28	N = 31	N = 56	N = 43

20. What are your principal sources of information about the PIP project? (CHECK ALL THAT APPLY)

	Project			Nonproject		
	Yes	No	N	Yes	No	N
A. Meetings with project staff	167	14	181	102	138	240
B. Informal discussions with project staff	155	26	181	186	54	240
C. Reports from students	46	135	181	151	89	240
D. Reports from parents	28	153	181	18	222	240
E. Materials contained in the PIP	151	30	181	62	178	240
F. Written progress reports prepared by the project staff	69	112	181	90	150	240
G. News media	33	148	181	48	192	240
H. Personal observation of the instructional program	143	38	181	97	143	240
I. Discussions with building principals	47	134	181	49	191	240

21. Which are the most useful or informative sources?

1) Informal in-person contacts with project staff; informal discussions with staff (include project director, project staff, site assistant and sending teachers); informal conversations in general

2) Formal meetings with project staff and/or project director--meetings may not be preceeded by "formal"

3) Involvement with the project; contact with instructional program (e.g., visit to a project classroom or laboratory); observation of the program

22. Which are the least useful or informative sources?

1) News media
2) Reports from, contact with, parents (also absence of parent complaints)
3) Meetings, discussions with building principals

23. What additional sources of information might have been useful for you?

1) Personal observation of program; demonstration of program
2) None; no other sources needed*
3) Contacts with, or information from, originating site or other PIP (tryout) sites*

24. Many factors might influence the decision of school district personnel to apply for a PIP. Please read all the possible sources of influence listed below and rank their relative importance in your school district's decision to apply. Give the factor you believe had the strongest influence on the decision a "1". Give the second most influential factor a "2" and so on until you have assigned a number to each factor. The least influential factor should be assigned a "5".

	Project							Nonproject						
	1	2	3	4	5	No Basis	N	1	2	3	4	5	No Basis	N
A. Interest in starting a program to serve specific grade levels	21	53	40	22	14	18	168	16	70	37	26	7	51	207
B. Pressure from the community to raise test scores	10	12	15	49	61	18	165	12	18	21	47	57	52	207
C. Awareness of educational needs of the overall student population	85	41	20	4	1	17	168	97	39	13	6	2	50	207
D. Need to bring additional sources of revenue into the district	12	24	28	47	38	18	167	13	18	30	44	48	51	204
E. Interest in replicating a program that had already proven successful in another district	10	43	38	34	23	17	165	12	28	48	33	31	51	203

	Project		Nonproject	
	Yes	No	Yes	No
(If no basis for answer, please check here ______)	26	154	73	162
	N = 180		N = 235	

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*Have same frequency of responses.

25. What other important factors led personnel in your district to apply for a PIP? Using the scale established in Question 24 above, please rate the relative importance of each of these additional factors.

1) No basis for answer; don't know

2) Awareness or recognition of pupil needs; low pupil achievement; low test scores

3) Interest in a specific program; help for pupils at particular grade levels; specific program features (e.g., individualized instruction) would benefit pupils

26. When you first heard about the PIP project, how effective did you think it would be in terms of helping students?

	Catch-Up		Conquest		HIT		IRIT		PTR		R-3	
	Project	Nonproject	Project	Nonproject	Project	Nonproject	Project	Nonproject	Project	Nonproject	Project	Nonproject
Very effective	17	12	18	12	12	5	5	12	26	18	21	9
Effective	5	5	9	4	3	4	0	5	1	6	9	11
Somewhat effective	3	28	11	34	6	19	4	17	2	7	22	22
Not very effective	0	0	2	2	0	2	0	1	0	1	5	0
Not at all effective	0	0	1	2	0	0	0	1	0	0	0	1
	N = 25	N = 45	N = 41	N = 54	N = 21	N = 30	N = 9	N = 36	N = 29	N = 32	N = 57	N = 43

27. How has your opinion changed since then?

	Catch-Up		Conquest		HIT		IRIT		PTR		R-3	
	Project	Nonproject	Project	Nonproject	Project	Nonproject	Project	Nonproject	Project	Nonproject	Project	Nonproject
Much more positive now	13	16	12	21	7	12	4	8	13	11	20	7
More positive now	1	10	8	6	5	4	2	10	2	3	12	5
No change	11	16	17	22	7	12	3	13	13	16	18	25
Less positive now	0	1	3	4	2	2	0	5	1	1	6	3
Much less positive now	0	2	1	1	0	0	0	0	0	1	1	3
	N = 25	N = 45	N = 41	N = 54	N = 21	N = 30	N = 9	N = 36	N = 29	N = 32	N = 57	N = 43

28. If your initial opinion has changed, why?

1) Noticed positive impacts on pupils; noticed positive impacts on pupil learning and achievement; have seen real learning taking place; comments from others

2) Noticed positive impact on pupil attitudes (e.g., motivation, self-image, pupils are eager to learn)

3) More familiar with the project or PIP; know more about the program; have studied package; have been able to see project in operation

29. Below is a list of possible goals or objectives for the PIP project in your school district. Although each of these statements may describe a beneficial effect of the project, different people may have different opinions of how necessary attainment of each goal is to the success of the project. Using the following scale, please indicate how much importance you would give to each of these statements in judging the success of your school's project:

1 - a primary goal; attainment is necessary for the project to be considered successful

2 - a secondary goal; attainment is important but not critical to the success of the project

3 - a possible side effect of the project

	Project				Nonproject			
	1	2	3	N	1	2	3	N
A. Improve reading skills of students in the project	166	11	1	178	220	15	2	237
B. Improve arithmetic skills of students in the project	90	31	48	169	118	56	57	231
C. Improve other academic skills of students in the project	52	90	30	172	71	115	48	234
D. Improve self-esteem or self-confidence of students in the project	133	35	9	177	140	74	18	232
E. Increase motivation of the students to learn	140	29	9	178	163	57	15	235
F. Reduce behavior problems	43	84	47	174	32	71	129	232
G. Reduce absenteeism	45	58	70	173	35	52	145	232
H. Improve student relationships	68	70	36	174	47	84	100	231
I. Improve teaching skills of project staff	72	55	46	173	78	63	87	228
J. Provide individualized attention to students in need of special help	167	10	1	178	191	36	7	234
K. Provide additional resources (staff, equipment, materials) to the district	62	64	49	175	69	76	84	229
L. Reduce class size	30	51	73	174	52	61	115	228
M. Provide needed funds to the district	51	57	68	176	59	49	118	226
N. Install a lasting program	83	61	32	176	89	81	56	226
O. Develop experience and expertise that can be passed on to other teachers in this district	48	84	42	174	72	93	65	230
P. Develop experience and expertise that can be passed on to other districts	31	68	75	174	48	78	105	231
Q. Improve school/community relations	63	63	47	173	57	92	81	230

30. Which of the following techniques have been used to describe the project to parents and other groups in the community? (CHECK ALL THAT APPLY)

		Project		
		Yes	No	N
A.	Letters to parents requesting permission for their children to participate	114	69	183
B.	Presentations at regular parent/teacher meetings (PTA)	108	75	183
C.	Presentations at PAC meetings	26	156	182
D.	Presentations at local teachers association meetings	58	125	183
E.	Presentations to interested community organizations (Lions Club, Rotary Club, etc.)	16	166	182
F.	Presentations to the school board	96	87	183
G.	News releases to local media	121	62	183
H.	Other news coverage	36	147	183
I.	Photo displays in banks, city offices, etc.	10	173	183
J.	Descriptive brochures mailed to parents or others in the community	64	119	183
K.	Individual conferences between parents of participating students and project staff	131	52	183
L.	Open house at project school(s)	148	35	183
M.	Displays in project school(s) or school district office	73	110	183
N.	[No basis for answer]	5	177	182

31. Have any of the following groups visited project classrooms or laboratories during instructional periods? (CHECK ALL THAT APPLY)

	Project		
	Yes	No	N
A. Nonproject teachers with students in the project	115	64	179
B. Other teachers in project schools	74	105	179
C. Teachers from nonproject schools	51	128	179
D. Principals from project schools	126	53	179
E. Principals from nonproject schools	36	143	179
F. District administrative staff	109	70	179
G. Parents of students in the project	118	60	178
H. Other parents	45	134	179
I. Representatives of local teachers associations	16	163	179
J. Members of the school board	65	114	179
K. [No basis for answer]	5	173	178

32. How would you describe the initial reactions to the project of each group listed below? Use the following scale:

1 - Highly favorable (e.g., enthusiastic, optimistic)
2 - Somewhat favorable (e.g., supportive but cautious)
3 - Neutral
4 - Somewhat opposed (e.g., uncertain, skeptical)
5 - Strongly opposed (e.g., negative, pessimistic)
6 - No basis for answer

	Univariate						
	1	2	3	4	5	6	N
A. Project staff	310	61	3	10	1	23	408
B. Other teachers in project schools	100	161	44	29	5	64	403
C. Principals in project schools	251	89	16	2	0	52	410
D. Students in the project	204	115	69	2	2	22	414
E. District administration	187	47	12	2	0	140	388
F. Local teachers association	78	75	37	3	1	186	380
G. School board	145	44	13	3	0	175	380
H. Parents	147	113	41	9	1	94	405

33. How have these reactions changed over the past few months?

1 - Grown more favorable
2 - No change
3 - Grown less favorable
4 - No basis for answer

	Univariate				
	1	2	3	4	N
A. Project staff	199	157	8	34	398
B. Other teachers in project schools	134	147	24	80	385
C. Principals in project schools	151	168	4	73	396
D. Students in the project	217	147	9	26	399
E. District administration	82	124	3	157	366
F. Local teachers association	56	102	2	193	353
G. School board	71	107	1	179	358
H. Parents	168	117	2	96	383

34. Which of the following factors probably contributed to any resistance or negative reactions to the project from staff or community groups? (CHECK ALL THAT APPLY)

	Univariate											
	Catch-Up		Conquest		HIT		IRIT		PTR		R-3	
Staff	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
A. Previous experience with special programs	3	64	31	62	8	44	3	39	13	45	23	76
B. Poor communications; people were not informed about the project	9	58	28	65	10	41	11	30	7	52	42	57
C. Presence of too many government programs in the community	1	66	6	88	2	50	0	42	7	52	6	93
D. Unfavorable publicity	0	67	1	93	2	50	0	42	0	57	2	97
E. Late start of the program	23	43	27	67	12	40	12	30	13	44	56	43
F. No resistance was encountered	17	50	22	72	10	42	13	29	20	38	16	83
G. Don't know	14	53	13	81	15	37	9	33	12	47	13	86
Community												
A. Previous experience with special programs	4	63	11	83	3	49	2	40	0	57	7	92
B. Poor communications; people were not informed about the project	15	50	26	67	14	36	8	34	9	46	35	63
C. Presence of too many government programs in the community	1	66	8	86	3	49	1	41	3	54	2	97
D. Unfavorable publicity	0	67	1	93	1	51	1	41	2	57	7	91
E. Late start of the program	10	57	4	90	8	44	5	37	4	55	19	80
F. No resistance was encountered	18	49	31	63	12	39	10	32	24	34	21	77
G. Don't know	24	43	16	78	16	36	14	28	19	40	22	77

35. How can community acceptance of the project be improved? (CHECK ALL THAT APPLY)

	Univariate (Project and Nonproject)		
	Yes	No	N
A. Favorable publicity to the local press	264	139	403
B. Reports of positive findings	316	87	403
C. Invitations to parents or community groups to visit the project	331	72	403
D. Meetings to inform parents and others about the project	327	76	403

36. What other techniques or strategies would be likely to improve community acceptance of the project?

1) Individual contacts with parents/community members (e.g., home visits by staff, parent/teacher conferences, invitations to parents or others to visit or observe project, communications to parents on why their child was selected or on progress child is making)

2) More information to the community; more and/or better publicity; more public relations (N.B., use for responses that are general in nature--i.e., those that emphasize importance of keeping community informed without specific suggestions as to ways of circulating information)

3) Enlist parent/community involvement (e.g., as aides, volunteers; solicit suggestions for planning)

37. What aspects, if any, of the project appear to have produced a negative reaction on the part of nonproject staff? (CHECK ALL THAT APPLY)

	Catch-Up		Conquest		HIT		IRIT		PTR		R-3	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
A. Lower class size for project teachers	4	64	15	81	13	37	2	43	4	60	47	51
B. More classroom aides for project teachers	7	61	9	86	15	35	1	44	6	58	58	40
C. Removing students from their classes for testing	13	55	28	68	6	45	2	43	6	58	7	91
D. Removing students from their classes for instruction	16	52	28	68	13	38	8	37	11	52	3	95
E. Waste of time and money on materials they consider outdated or otherwise inappropriate	1	68	2	94	4	47	1	44	4	60	11	87
F. Additional burden (time and effort) to nonproject staff	2	67	9	87	6	45	1	44	1	63	11	87
G. Frequent changes in schedule	15	53	16	80	13	38	9	36	12	52	24	74
H. Extra time available to project teachers for planning and preparation	7	62	12	84	13	38	11	34	9	55	39	59
I. Project staff are allowed more time off during the day	8	61	4	92	12	39	8	37	8	56	15	83
J. Project staff are not responsible for lunchroom or playground duty	13	56	11	85	7	44	3	42	9	55	1	97
K. No resistance was encountered	21	47	33	63	12	39	18	27	26	38	14	84
L. Don't know	11	58	12	84	6	45	10	35	13	51	9	89

38. Have you talked about the project to the parents of any of your students who are currently participating in the project?

	Univariate
Yes	257
No (If No, please go on to Question 44)	167
	N = 424

39. About how many parents have you talked to?

	Project	Nonproject
1-10	79	82
11-20	36	7
21-30	15	4
31-40	6	1
41-50	3	1
51-60	0	0
61-70	0	0
71-80	1	0
	N = 140	N = 95

40. In what kinds of situations have you discussed the project with parents? (CHECK ALL THAT APPLY)

	Project			Nonproject		
	Yes	No	N	Yes	No	N
A. Regularly scheduled individual conferences	57	94	151	53	55	108
B. Special individual conferences requested by parent	52	99	151	12	96	108
C. Special individual conferences at my request	48	103	151	24	84	108
D. Parent visits to classroom during instruction	73	78	151	40	68	108
E. PTA meetings	58	93	151	35	73	108
F. PAC meetings	14	137	151	2	106	108
G. Other functions (open house, etc.)	97	54	151	52	56	108

41. What aspects of the project did you discuss with the parents? (CHECK ALL THAT APPLY)

	Project			Nonproject		
	Yes	No	N	Yes	No	N
A. Objectives of the project	128	24	152	68	40	108
B. Materials used in the project	125	27	152	46	62	108
C. Instructional techniques used in the project	122	30	152	35	73	108
D. How students were selected for participation	89	63	152	64	44	108
E. Special needs of the individual child	106	46	152	78	30	108
F. Progress of the individual child	135	17	152	77	31	108
G. Progress of project students in general	69	83	152	26	82	108

42. As far as you know, have any parents asked to have their children removed from the project?

	Univariate					
	Catch-Up	Conquest	HIT	IRIT	PTR	R-3
Yes	7	6	8	2	2	1
No (If No, please go on to Question 44)	42	54	17	28	42	50
	N = 49	N = 60	N = 25	N = 30	N = 44	N = 51

43. If you answered "Yes" to Question 42, please explain details briefly (how many and why).

Total Number of Parents or Children

1) One; request came from one parent only

2) Two to five; requests from between two and five parents all together; requests from a couple of parents; requests from a few parents

Disposition of Request

1) Child or children were removed from project following parent requests; were not allowed to participate in project

2) Child was allowed to remain in project (e.g., after the project was explained, parents agreed to have children stay in project)

Reasons for Parent Requests

1) Parent-initiated--objections to having child singled out for special help (parents felt their children did not need the program); program not challenging; would be better in the regular classroom; did not need programs associated with the needy, disadvantaged, etc.; inappropriate selection of students

2) Child-initiated, general (e.g., parents said their children did not want to be in the program--no specific reasons indicated)*

3) Parent-initiated--objections to program features (e.g., students connection with our program or program of this type; work was too hard for child, clinicians making the students work too hard; did not want project to succeed; program not producing positive results)*

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*Items 2) and 3) have the same frequency of response.

44. Have you talked about the project with any other parents (i.e., those who do not have children in the project)?

	Univariate
Yes	137
No (If No, please go on to Question 46)	287
	N = 424

45. As far as you know, have any of these parents asked to have their children enrolled in the project?

Yes	Univariate
Yes	51
No	85
	N = 136

46. Based on reports from parents and from other staff members, approximately how often have parents made the following comments about their children in the project? Use the following scale:

1 - constantly
2 - frequently
3 - occasionally
4 - seldom
5 - never

	Project						Nonproject					
	1	2	3	4	5	N	1	2	3	4	5	N
A. Children seem to enjoy coming to school more than they used to	14	54	44	17	28	157	12	38	51	24	59	184
B. Children are being given too many tests	4	5	13	30	102	154	1	6	16	25	134	182
C. Children seem to be falling behind in their other subjects	3	5	19	30	95	152	4	5	23	27	124	183
D. Children are doing better in their school work and/or are earning higher grades	21	63	59	9	12	164	14	42	57	27	48	188
E. Children seem to have better self-concepts	20	56	51	17	18	162	19	36	50	31	54	190
F. Children complain that they are assigned extra work by their other teachers when they miss class to participate in project-related activities	6	6	14	33	95	154	4	7	14	27	134	186
G. Children seem to be more motivated to learn	31	60	40	11	18	160	27	45	55	19	44	190
H. Children do not like being in the project	5	1	10	53	87	156	1	5	18	37	123	184

47. What other comments have parents made about their children or about the PIP project?

1) None; none in addition to those listed in previous question; haven't heard of any or not aware of any (if not additionally specified as "don't know"); confused about project

2) Favorable comments about the program (not about results) or program features. Reactions favorable, enthusiastic, supportive, encouraging; parents pleased with project, glad to have it in school, happy to have their children in the project; grateful, positive, interested.

Parents expect their children will be much better readers after the project is over.

Good project for children who have a hard time learning; believe project is excellent means of helping students to learn to full capabilities; glad children getting extra help, individual attention they need. Wish children could have had the program sooner.

Opportunity to explore and learn by design, more equipment and material to work with.

Parents like the team situation where they can talk to a group of teachers all at once about their children; frequent parent conferences.

3) Favorable comments about impacts on child attitudes.

Children enjoy coming to school more, feel better about school, more interested in school, have new interest in learning, experiencing success for the first time, children want more work.

Children are making an effort to improve their reading; children are reading more at home.

Tutors are proud of being able to help other students.

Children enjoy going to the project, think lab is fun, don't even realize they are learning, have sense of being invited to participate in something special, enjoy program activities and methods:

- Children are reading better; reading better orally; better able to read everyday things; better able to select reading materials.
- Can see lots of learning taking place; growth in skills.

Pleased with results (unspecified); seems to be helping.

48. Approximately what proportion of your students who are in the project have shown satisfactory improvement in each of the areas listed below? Use the following scale:

1 - all students
2 - most students
3 - about half
4 - a few students
5 - no students
6 - no basis for answer

	Project							Nonproject						
	1	2	3	4	5	6	N	1	2	3	4	5	6	N
A. Reading skills	27	94	24	11	1	23	180	33	78	25	44	7	44	231
B. Arithmetic skills	10	38	12	11	1	95	167	15	37	21	46	17	84	220
C. Other academic skills	2	23	18	21	1	97	162	14	42	26	45	13	79	219
D. Self-esteem or self-confidence	24	90	36	28	0	4	182	40	68	27	51	10	31	227
E. Relationships with other students	20	84	32	27	1	16	180	27	62	29	43	21	40	222
F. Relationships with teaching staff in the project	35	117	9	13	1	8	183	54	72	12	15	7	61	221
G. Relationships with other teachers and aides	15	71	19	19	1	52	177	35	66	17	33	10	59	220
H. Relationships with other building staff (administration, counselors, etc.)	8	51	24	20	2	73	178	24	53	10	23	9	97	216
I. Motivation to learn	17	108	27	26	0	4	182	40	75	30	38	13	30	226
J. Attendance	15	94	15	19	7	31	181	33	70	18	19	23	59	222
K. Behavior in the classroom	18	98	24	22	2	19	183	18	65	21	48	24	50	226
L. Behavior outside the classroom	9	50	22	22	3	75	181	10	55	22	33	30	72	222

49. The statements below describe possible benefits of the PIP project in your schools and some difficulties that may be associated with the project. Based on your experience over the past year, you will probably agree with some of the statements and disagree with others. Please indicate the response that most closely corresponds to your own opinions regarding benefits and difficulties associated with the PIP project.

	Univariate						
	Strongly Agree	Tend to Agree	Mixed Feelings	Tend to Disagree	Strongly Disagree	[No Basis for Answer]	N
A. Nonproject teachers need more information about project objectives	210	152	31	16	3	15	427
B. Participation in the project has made project staff more aware of student needs	178	155	37	10	7	40	427
C. Students are not given enough time for project-related activities	24	55	81	109	52	102	423
D. Project teachers share information regarding needs and progress of students in the project with other teachers	134	139	60	39	27	26	425
E. The project has resulted in increased parent involvement	31	81	77	94	40	101	424
F. Students in the project are given too many tests	23	16	43	147	84	107	420
G. Other teachers in the district would benefit from attending some of the training sessions held for project staff	100	157	68	26	9	63	423
H. The project does not serve the needs of participating students	2	6	51	114	214	35	422
I. Project activities are highly disruptive to regular classroom schedules	12	19	71	135	162	24	423
J. It is important for nonproject teachers to visit project classrooms or laboratories during instructional periods	145	165	59	26	8	21	424
K. Instructional materials used in the project are not compatible with the regular curriculum	12	30	41	137	138	67	425
L. Participation in the project has helped project staff to improve their classroom management skills	76	133	49	18	5	142	423
M. Students do not like being in the project	3	9	47	116	221	29	425
N. Too much project staff time is taken up with meetings and planning sessions	12	23	57	119	87	126	424
O. Communication between project and nonproject staff needs to be improved	115	170	56	54	19	10	424
P. Participation in the project has made project staff more effective as teachers	81	129	51	12	9	142	424
Q. Project students are missing critical activities in their other classes because of their participation in the project	11	25	53	151	154	28	422
R. Many nonproject teachers would like to use instructional materials like those in the project in their classrooms	128	152	50	17	7	71	425
S. Nonproject teachers share information regarding needs and progress of students in the project with project instructional staff	77	169	68	42	19	49	424
T. Project activities, including instruction, are interrupted too often by visitors to the classroom or laboratory	12	8	18	126	117	141	422
U. Nonproject teachers are often reluctant to release their students from other classes to participate in project-related activities	11	34	38	144	129	69	425
V. Participation in the project has exposed project staff to effective instructional techniques and strategies	106	175	31	8	5	95	420
W. Instructional materials used in the project are not suited to the ability level of the students	7	9	39	115	167	83	420
X. Nonproject teachers assign extra work to their students when they miss regular classroom time	9	20	25	123	147	101	425
Y. Many nonproject teachers would like to use instructional techniques and strategies like those in the project in their classrooms	79	155	65	12	8	105	424
Z. Project and nonproject staff have worked together to help make the project effective for students	97	143	83	42	27	34	426

50. In what ways do opinions of most of your colleagues differ from your opinions? (CHECK ONE)

	Univariate					
	Catch-Up	Conquest	HIT	IRIT	PTR	R-3
Most others are much more positive	2	3	1	0	1	1
Most others are somewhat more positive	1	3	5	1	3	7
Most others share my opinions	35	55	29	31	41	54
Most others are somewhat more negative	4	12	4	3	3	13
Most others are much more negative	0	0	1	0	0	0
[No basis for answer]	0	0	0	0	0	0
	N = 58	N = 73	N = 40	N = 35	N = 48	N = 75

51. Please use the following scales to describe your general professional feelings about the PIP project in your school district.

		Univariate					
		Catch-Up	Conquest	HIT	IRIT	PTR	R-3
a)	Very positive	51	49	27	24	51	40
	Somewhat positive	15	27	12	13	2	34
	Neutral	2	13	5	6	4	17
	Somewhat negative	0	3	0	0	0	2
	Very negative	1	0	0	1	1	1
		N = 69	N = 92	N = 44	N = 44	N = 58	N = 94

		Univariate					
		Catch-Up	Conquest	HIT	IRIT	PTR	R-3
b)	Indifferent	1	0	0	0	3	2
	Somewhat indifferent	0	4	2	0	3	4
	Neutral	6	19	5	6	2	17
	Somewhat enthusiastic	13	22	12	8	4	35
	Enthusiastic	45	46	21	27	40	33
		N = 65	N = 91	N = 40	N = 41	N = 52	N = 91
c)	Very supportive	58	63	37	28	51	52
	Somewhat supportive	9	22	9	12	5	26
	Neutral	2	8	3	1	0	15
	Somewhat opposed	0	2	0	0	0	1
	Very opposed	0	0	0	1	1	0
		N = 69	N = 95	N = 49	N = 42	N = 57	N = 94
d)	Very warm	50	49	25	27	44	41
	Somewhat warm	12	24	10	9	6	28
	Neutral	2	13	6	4	3	19
	Somewhat cool	0	4	0	0	1	3
	Very cool	1	0	0	1	1	2
		N = 65	N = 90	N = 41	N = 41	N = 55	N = 93

	Univariate					
	Catch-up	Conquest	HIT	IRIT	PTR	R-3
e) Very dissatisfied	0	0	0	0	2	3
Somewhat dissatisfied	1	4	2	1	1	2
Neutral	6	13	7	3	1	26
Somewhat satisfied	19	36	13	11	6	35
Very satisfied	38	34	19	25	41	25
	N = 64	N = 87	N = 41	N = 40	N = 51	N = 91

52. Please use the following scales to describe your professional judgment of the PIP project as a method of teaching.

	Catch-Up Project	Conquest Project	HIT Project	IRIT Project	PTR Project	R-3 Project
a) Very useful	22	32	13	8	29	41
Somewhat useful	1	3	4	1	1	11
Neutral	1	4	2	0	0	3
Somewhat useless	0	1	0	0	0	1
Very useless	0	0	0	0	1	0
	N = 24	N = 40	N = 19	N = 9	N = 31	N = 56

	Catch-Up Project	Conquest Project	HIT Project	IRIT Project	PTR Project	R-3 Project
b) Very discouraging	0	0	0	0	0	0
Somewhat discouraging	0	1	0	0	0	1
Neutral	1	4	2	0	1	4
Somewhat promising	1	4	3	1	0	16
Very promising	21	31	11	8	24	33
	N = 23	N = 40	N = 16	N = 9	N = 25	N = 54

	Catch-Up Project	Conquest Project	HIT Project	IRIT Project	PTR Project	R-3 Project
c) Very irrelevant	0	1	0	0	1	0
Somewhat irrelevant	0	1	0	0	0	0
Neutral	1	3	1	0	1	8
Somewhat relevant	3	2	6	2	1	14
Very relevant	18	31	8	7	22	29
	N = 22	N = 38	N = 15	N = 9	N = 25	N = 51

	Catch-Up Project	Conquest Project	HIT Project	IRIT Project	PTR Project	R-3 Project
d) Very effective	19	21	9	6	26	29
Somewhat effective	5	13	6	3	1	17
Neutral	1	4	3	0	1	5
Somewhat ineffective	0	1	0	0	0	2
Very ineffective	0	1	0	0	1	0
	N = 25	N = 40	N = 18	N = 9	N = 29	N = 53

	Catch-Up Project	Conquest Project	HIT Project	IRIT Project	PTR Project	R-3 Project
e) Very interesting	21	25	10	8	28	32
Somewhat interesting	2	9	3	1	1	16
Neutral	0	5	4	0	0	3
Somewhat dull	1	0	1	0	1	2
Very dull	0	1	0	0	1	0
	N = 24	N = 40	N = 18	N = 9	N = 31	N = 53

53. How relevant to the needs of your school is each of the aspects of your PIP project listed below?

	Catch-Up Project	Conquest Project	HIT Project	IRIT Project	PTR Project	R-3 Project
a) Staffing						
Very relevant	15	27	16	6	20	30
Somewhat relevant	6	11	2	2	3	15
Neutral	0	0	1	0	2	6
Not very relevant	0	1	0	0	0	1
Not at all relevant	1	0	1	0	0	0
	N = 22	N = 39	N = 20	N = 8	N = 25	N = 52

	Catch-Up Project	Conquest Project	HIT Project	IRIT Project	PTR Project	R-3 Project
b) Project organization and management						
Very relevant	13	22	14	7	18	16
Somewhat relevant	7	11	3	1	4	17
Neutral	2	3	1	1	1	12
Not very relevant	0	1	1	0	1	4
Not at all relevant	1	1	0	0	1	1
	N = 23	N = 38	N = 19	N = 9	N = 25	N = 50
c) Criteria and procedures for selection of students						
Very relevant	14	21	14	6	20	7
Somewhat relevant	4	13	0	3	5	15
Neutral	3	5	4	0	1	9
Not very relevant	0	0	2	0	0	3
Not at all relevant	1	1	1	0	1	6
	N = 22	N = 40	N = 21	N = 9	N = 27	N = 40

	Catch-Up Project	Conquest Project	HIT Project	IRIT Project	PTR Project	R-3 Project
d) Curriculum (materials, equipment, etc.)						
Very relevant	20	19	9	7	19	28
Somewhat relevant	4	9	11	2	5	14
Neutral	0	11	1	0	1	9
Not very relevant	0	1	0	0	0	1
Not at all relevant	0	0	0	0	1	1
	N = 24	N = 40	N = 21	N = 9	N = 26	N = 53
e) Instructional techniques						
Very relevant	18	23	11	7	23	28
Somewhat relevant	6	10	8	2	3	16
Neutral	0	5	2	0	0	9
Not very relevant	0	0	0	0	0	0
Not at all relevant	0	1	0	0	1	0
	N = 24	N = 39	N = 21	N = 9	N = 27	N = 53

	Catch-Up Project	Conquest Project	HIT Project	IRIT Project	PTR Project	R-3 Project
f) Student grouping patterns						
Very relevant	12	23	11	4	16	18
Somewhat relevant	9	9	5	3	3	11
Neutral	2	2	3	1	3	11
Not very relevant	1	3	1	0	0	4
Not at all relevant	0	1	0	1	1	3
	N = 24	N = 38	N = 20	N = 9	N = 23	N = 47

54. How different is each of the aspects of your PIP project listed below from standard practices in your school?

	Project Staff						
	Very Different	Somewhat Different	Neutral	Not Very Different	Not at All Different	[No Basis for Answer]	N
A. Staffing	48	35	20	13	46	17	179
B. Organization and management	52	43	22	12	29	21	179
C. Curriculum (materials, equipment, etc.)	65	39	23	18	24	12	181
D. Instructional techniques	60	36	23	21	24	17	181
E. Student grouping patterns	56	28	25	27	27	19	182

QUESTION 55 APPLIES TO PIP PROJECT INSTRUCTIONAL STAFF ONLY.
NON-PROJECT STAFF PLEASE GO ON TO QUESTION 56.

55. If you had your choice, would you: (CHECK ONE)

	Catch-Up Project	Conquest Project	HIT Project	IRIT Project	PTR Project	R-3 Project
A. Continue to use the instructional methods and materials recommended in the PIP	13	7	4	3	20	27
B. Make some changes in methods or materials	11	28	15	6	4	24
C. Make many changes in methods or materials	1	5	0	0	0	3
D. Not use the instructional methods and materials recommended in the PIP at all	0	1	0	0	0	1
	N = 25	N = 41	N = 19	N = 9	N = 24	N = 55

56. To what extent would you support the PIP project if asked about its merit?

	Catch-Up		Conquest		HIT		IRIT		PTR		R-3	
	Project	Nonproject	Project	Nonproject	Project	Nonproject	Project	Nonproject	Project	Nonproject	Project	Nonproject
Very much	23	26	28	27	14	16	8	18	27	26	37	11
Somewhat support	1	14	9	14	7	9	1	11	4	3	14	14
Undecided	0	3	4	9	0	5	0	5	0	1	3	12
Not very much	0	0	0	3	0	1	0	0	0	1	2	2
Not at all	0	0	0	0	0	0	0	0	0	0	0	1
	N = 24	N = 43	N = 41	N = 53	N = 21	N = 31	N = 9	N = 34	N = 31	N = 31	N = 56	N = 40

57. If you had your choice, would you be part of the PIP project instructional staff next year? (CHECK ONE)

	Catch-Up Project	Conquest Project	HIT Project	IRIT Project	PTR Project	R-3 Project
Definitely yes	20	24	17	9	26	36
Probably yes	4	11	1	0	2	16
Undecided	1	6	2	0	5	3
Probably no	0	0	0	0	0	1
Definitely no	0	0	1	0	0	1
	N = 25	N = 41	N = 21	N = 9	N = 33	N = 57

58. Would you recommend the project to parents of students in need of special help in reading and/or math? (CHECK ONE)

	Univariate					
	Catch-Up	Conquest	HIT	IRIT	PTR	R-3
Definitely yes	57	71	38	32	58	63
Probably yes	10	19	11	11	5	21
Undecided	0	5	2	3	2	12
Probably no	1	1	0	0	0	1
Definitely no	0	0	0	0	0	1
	N = 68	N = 97	N = 51	N = 46	N = 55	N = 98

59. Have you seen the orientation filmstrip which describes the PIP project?

	Catch-Up		Conquest		HIT		IRIT		PTR		R-3	
	Project	Nonproject	Project	Nonproject	Project	Nonproject	Project	Nonproject	Project	Nonproject	Project	Nonproject
Yes	13	3	31	10	20	9	9	9	27	13	39	14
Uncertain	0	2	3	2	0	3	0	3	0	1	3	3
No	12	37	7	43	1	19	0	25	5	18	15	25
	N = 25	N = 42	N = 41	N = 55	N = 21	N = 31	N = 9	N = 37	N = 32	N = 32	N = 57	N = 42

60. Have you seen the Project Information Package (the box) and/or any of its contents?

	Catch-Up		Conquest		HIT		IRIT		PTR		R-3	
	Project	Nonproject	Project	Nonproject	Project	Nonproject	Project	Nonproject	Project	Nonproject	Project	Nonproject
Yes	23	6	35	10	19	10	9	4	22	20	43	11
Uncertain	2	1	2	5	0	4	0	9	3	2	5	3
No	0	36	4	41	2	17	0	24	7	10	9	27
	N = 25	N = 43	N = 41	N = 56	N = 21	N = 31	N = 9	N = 37	N = 32	N = 32	N = 57	N = 41

61. Have you had a chance to read or study any of the materials in your school's Project Information Package?

	Catch-Up		Conquest		HIT		IRIT		PTR		R-3	
	Project	Nonproject	Project	Nonproject	Project	Nonproject	Project	Nonproject	Project	Nonproject	Project	Nonproject
Yes	22	2	29	6	20	5	9	2	22	15	40	6
Uncertain	1	4	3	1	0	2	0	0	3	2	5	2
No	2	36	9	48	1	24	0	35	8	15	11	34
	N = 25	N = 42	N = 41	N = 55	N = 21	N = 31	N = 9	N = 37	N = 33	N = 32	N = 56	N = 42

(If No, please go on to Question 69)

62. Below are listed the components of a Project Information Package. Please check each one that you have read or studied. For each component that you have checked, please rate its clarity, usability and effectiveness. Use the following scale:

CLARITY	1 - very clear; can be understood easily 2 - fairly clear 3 - not at all clear; very confusing
USABILITY	1 - very usable; procedures described were easy to implement 2 - fairly usable; some procedures were difficult to implement 3 - not at all usable; procedures were very difficult to implement or required major change
EFFECTIVENESS	1 - very effective; procedures produced positive results 2 - fairly effective; procedures had mixed results 3 - not at all effective; procedures produced negative results

	Univariate											
	Read or Studied			Clarity			Usability			Effectiveness		
	Yes	No	N	1	2	3	1	2	3	1	2	3
A. Orientation filmstrip	146	38	184	89	42	6	60	64	7	53	72	7
B. Project overview	126	58	184	62	52	4	52	60	2	50	63	2
C. Project management directory	94	90	184	45	40	1	32	51	3	36	50	1
D. Project management displays	76	108	184	45	24	2	30	35	4	33	32	4
E. Staff qualifications and preparation checklist	122	62	184	85	27	2	68	35	4	67	37	5
F. Inservice training guide	102	82	184	49	41	4	42	42	5	44	41	4
G. Starter set: implementation	106	78	184	58	36	8	46	45	6	47	47	4
H. Classroom management directory	112	72	184	66	35	2	50	47	3	49	47	4
I. Student relationships album	94	90	184	57	29	2	35	43	4	36	42	4
J. Professional relationships guide	97	87	184	65	25	2	50	33	4	46	39	3
K. Hardware/software packet--catalogs and brochures	103	81	184	54	34	10	34	50	10	34	48	10
L. Hardware/software--summary list of materials	106	78	184	50	39	10	37	51	9	35	51	8
M. Hardware/software packet--information sheets, listing of publishers	90	94	184	46	31	11	36	41	9	33	45	9

63. How well is each of the following aspects of the project described in the PIP package?

	Catch-Up Project	Conquest Project	HIT Project	IRIT Project	PTR Project	R-3 Project
a) Staffing						
Very well	15	14	17	7	16	19
Fairly well	3	8	2	1	3	11
Undecided	2	4	1	0	0	7
Not very well	1	1	0	0	0	1
Not at all	0	0	0	0	1	0
	N = 21	N = 27	N = 20	N = 8	N = 20	N = 38
b) Project organization and management						
Very well	8	12	12	1	16	12
Fairly well	9	11	6	4	4	13
Undecided	1	3	0	2	0	10
Not very well	1	1	0	0	0	3
Not at all	1	0	0	0	1	0
	N = 20	N = 27	N = 18	N = 7	N = 21	N = 38
c) Criteria and procedures for selection of students						
Very well	8	8	12	2	14	5
Fairly well	3	12	5	4	6	15
Undecided	2	8	1	1	0	2
Not very well	7	1	2	1	0	4
Not at all	2	0	0	0	1	0
	N = 20	N = 29	N = 20	N = 8	N = 21	N = 26
d) Curriculum (materials, equipment, etc.)						
Very well	8	6	10	0	18	7
Fairly well	6	12	3	2	2	19
Undecided	6	6	4	2	1	6
Not very well	1	3	2	4	0	6
Not at all	0	0	0	0	0	0
	N = 21	N = 27	N = 19	N = 8	N = 21	N = 38

	Catch-Up Project	Conquest Project	HIT Project	IRIT Project	PTR Project	R-3 Project
e) Instructional techniques						
Very well	3	5	11	0	19	9
Fairly well	9	8	5	2	1	20
Undecided	7	9	2	2	0	7
Not very well	1	5	1	3	0	1
Not at all	1	2	0	1	1	1
	N = 21	N = 29	N = 19	N = 8	N = 21	N = 38
f) Student grouping patterns						
Very well	3	5	13	1	8	12
Fairly well	7	10	3	1	8	9
Undecided	6	7	1	2	3	9
Not very well	2	6	3	1	0	3
Not at all	3	1	0	3	0	0
	N = 21	N = 29	N = 20	N = 8	N = 19	N = 33

64. Which of the items listed below that are contained in the PIP package should be revised for use in the future? Use the following scale:

1 - adequate as is
2 - requires some revision
3 - requires extensive revision
4 - no basis for answer

	Project Staff				
	1	2	3	4	N
A. Cross-referenced index for all nine components	54	31	6	47	138
B. Listing of essential hardware/software materials	38	50	21	31	140
C. Descriptions of hardware/software materials	36	48	21	33	138
D. Description of goals for all phases of the project	63	51	9	18	141
E. Description of hierarchical relationships among staff involved in the project	72	43	5	21	141
F. Description of specific responsibilities of each staff member	76	38	11	16	141
G. Sample lesson plans	39	52	32	20	143
H. Guidelines for quantities of special materials required for use in the project	40	54	23	25	142
I. Guidelines for coordination of project activities with regular school activities	42	49	23	27	141

65. What other revisions or additions to materials contained in the package would you recommend?

1) Revise or add to information about instructional program; add materials for gaming simulation; give more examples of coordination between curriculum components, more alternative activities; say how skills should be related to particular materials; update program materials by including latest techniques and procedures; provide more curriculum material; suggest alternatives to curriculum materials and/or instructional techniques (e.g., to make more appropriate to each site); add to information on daily activities; suggested additional or alternative materials; correlation with classroom teachers.

2) None; none in addition to those listed in the previous question.

3) No basis for answer; do not choose to reply; does not apply.

66. In general, how much adaptation to package guidelines in the following areas has been necessary to suit conditions or policies in your school district?

	Project Staff						
	None at all	Very Little	Some	Much	Very Much	[No Basis for Answer]	N
A. Staffing	55	14	30	8	18	21	146
B. Project organization and management	39	19	42	14	11	19	144
C. Criteria or procedures for selection of students	45	23	35	8	13	23	147
D. Curriculum (materials, equipment, etc.)	24	30	46	12	16	17	145
E. Instructional techniques	33	31	46	9	17	10	146
F. Student grouping patterns	32	35	34	14	15	17	147

67. How difficult has it been to fit the package guidelines to the needs of your school?

	Catch-Up Project	Conquest Project	HIT Project	IRIT Project	PTR Project	R-3 Project
Not at all difficult	9	5	10	4	17	10
Very little difficulty	9	9	4	3	4	11
Some difficulty	3	13	4	2	2	11
Difficult	0	1	1	0	0	5
Very difficult	0	2	1	0	0	2
	N = 21	N = 30	N = 20	N = 9	N = 23	N = 39

68. On the whole, how much does the project in your district resemble the guidelines in the package?

	Catch-Up Project	Conquest Project	HIT Project	IRIT Project	PTR Project	R-3 Project
Identical to package	5	1	6	0	16	3
Very similar to package	14	10	11	8	7	12
Somewhat similar to package	1	11	1	0	0	18
Different from package	0	3	1	1	0	4
Very different from package	0	3	1	0	0	1
	N = 20	N = 28	N = 20	N = 9	N = 23	N = 38

69. Suppose that personnel in other districts wanted to set up a project like your school's PIP project. If visits to your school or some other school in which the project was already operating were possible, when would they be most useful? Please assign the most useful time for a visit a "1", the second most useful time a "2", the third most useful time a "3", and the least useful time a "4".

	Project Staff				
	1	2	3	4	N
Prior to deciding to set up the project	55	14	10	97	176
A. During preliminary planning--i.e., determining objectives; identifying resources needed (staff, materials equipment)	32	72	64	8	176
B. During project start-up--i.e., obtaining resources, selecting students for participation, training staff	12	91	55	17	175
C. During project operations--i.e., once the instructional phase of the project was underway	68	21	32	55	176

70. What other forms of assistance (consultants, etc.) would be needed by personnel in another district if they wanted to set up a project similar to yours?

1) No basis for answer; don't know.

2) Personal contacts with developer site or other PIP sites (consultant from developer or originating site; meetings with staff from other sites, resource person from another site); visit another project site.

3) None; no help needed.*

4) Staff; additional project staff, qualified project staff, experienced personnel (e.g., more teachers; another counselor; coordinator to maintain communication; hire director who has experienced implementing the project elsewhere); if larger program would need more staff, steering committee, testing personnel.*

71. If your school's PIP was widely available (i.e., to other schools in your district or to other districts), would you recommend it to your colleagues?

	Catch-Up Project	Conquest Project	HIT Project	IRIT Project	PTR Project	R-3 Project
Definitely yes	23	23	17	8	28	28
Probably yes	2	14	4	1	3	25
Undecided	0	3	0	0	1	2
Probably no	0	1	0	0	0	2
Definitely no	0	0	0	0	0	0
	N = 25	N = 41	N = 21	N = 9	N = 32	N = 57

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*Items 3) and 4) have the same frequency of responses.

72. Are you familiar with other PIPs?

	Univariate
Yes	32
No (If No, please go on to Question 75)	391
	N = 423

73. Would you recommend other PIPs over the one being used in your school?

	Catch-Up	Conquest	HIT	IRIT	PTR	R-3
Definitely yes	0	0	0	0	1	1
Probably yes	0	0	0	0	2	0
Undecided	1	1	2	0	0	2
Probably no	5	1	0	1	0	1
Definitely no	1	0	2	0	1	0
	N = 7	N = 2	N = 4	N = 1	N = 4	N = 4

74. Why or why not?

1) Happy, interested in this PIP; program successful, effective, works, very good, valuable; well managed program (no specific impacts indicated).

2) Positive impact on student learning; meeting children's educational needs; improved reading and/or math skills; advantage to children; children learn at their own level.

3) No basis for response; not prepared to respond; don't know; too early to tell; reserving judgment; not familiar with other PIPs.

75. What do you think have been the most positive results of the PIP project?

1) Improved attitudes toward school and learning (e.g., motivation, self-image, behavior, experience of success, students enjoy coming to school), improvement in interest to read; less absenteeism.

2) Student improvement in academic skills (e.g., progress in reading or math.

3) Increased recognition of individual student needs (individualized diagnosis and/or instruction; individual needs are better met; staff is more aware of student needs; teachers know students better, learning disabilities recognized.

76. What do you think have been the most serious problems connected with the PIP project?

1) Late program start; late and inadequate preparation; initial problems of organization, planning.

2) None; no problems.

3) Lack of communication between project and nonproject staff; no time to visit project classroom because of regular classroom responsibilities; no procedures for reporting to nonproject staff regarding student progress or placement. Tutors attempting to "boss" teachers.

77. If you had a free hand, what types of changes to the project would you make in the areas listed below?

a) Staffing/

1) None; no change (no favorable comments).
2) Expand staff (e.g., add full-time supervisor; assistant to project officer; add clerical staff; more aides; more full-time teachers, tutors, consultants), parent volunteers, student aides.

3) No basis for response.

b) Project organization and management

1) None; no changes (no favorable comments).
2) Don't know; no basis for response.
3) Improve communication between project and nonproject staff (e.g., coordinate materials and activities with nonproject staff; student scheduling; hold conferences; provide information to nonproject staff regarding student progress; keep staff informed); student selection.

c) Criteria and procedures for selection of students

1) None; no change (no favorable comments).
2) No basis for response.
3) Classroom teachers; more consultation with teacher recommendations; give teacher check list. Start in spring, then test in fall.

d) Curriculum (materials, equipment, etc.)

1) None; no changes (no favorable comments).
2) No basis for answer, don't know.
3) Materials for specific grade levels or age groups (e.g., more variety needed, different materials needed).

e) Instructional techniques

1) None; no change (no favorable comments).
2) No basis for response.
3) Better training in techniques before school opens.

f) Student grouping patterns

1) No change (no favorable comments).
2) No basis for response.
3) No change (with favorable comments).*
4) Group homogeneously--by skills, abilities (tracks).*

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*Items 3) and 4) have the same frequency of responses.

78. Please enter the code for the title which best describes your current major teaching assignment.

	Project	Nonproject
PIP project teacher	71	0
Primary elementary (K-3)	2	84
Upper elementary (4-6)	0	62
Middle school/junior high (7-8 or 9)	17	51
High school (9 or 10-12)	1	13
Bilingual teacher	0	2
Remedial reading teacher	16	3
Remedial math teacher	0	1
Special education teacher	0	1
Substitute teacher	1	0
Resource specialist	1	0
Instructional aide or paraprofessional	47	9
Tutor supervisor	2	0
Paraprofessional tutor	25	4
Parent volunteer	0	0
Other	1	10
	N = 184	N = 240

79. By the end of the current school year, how many years will you have held this assignment?

	Project	Nonproject
0	8	6
1-10	170	183
11-20	3	33
21-30	0	11
31-40	0	6
	N = 181	N = 239

80. If you have any other current assignments, please enter the codes, the percent of your time devoted to each, and the number of years you have held the assignment.

Assignment	Project	Nonproject
PIP project teacher	3	0
Primary elementary (K-3)	5	7
Upper elementary (4-6)	4	7
Middle school/junior high (7-8 or 9)	6	7
High school (9 or 10-12)	0	9
Bilingual teacher	0	2
Remedial reading teacher	5	1
Remedial math teacher	1	1
Special education teacher	1	1
Substitute teacher	2	2
Resource specialist	3	1
Instructional aide or paraprofessional	5	6
Tutor supervisor	1	1
Paraprofessional tutor	2	1
Parent volunteer	2	1
Other	7	10
	N = 47	N = 57

% of Time	Project	Nonproject
0-10	8	7
11-20	4	3
21-30	4	4
31-40	1	3
41-50	5	3
51-60	0	0
61-70	0	0
71-80	2	0
81-90	1	0
91-100	1	1
	N = 26	N = 22

Years in Post	Project	Nonproject
0	1	0
1-10	39	47
11-20	3	4
21-30	1	2
	N = 44	N = 53

81. Please enter the code from above which best describes your immediate previous assignment.

Assignment	Project	Nonproject
PIP project teacher	7	0
Primary elementary (K-3)	17	54
Upper elementary (4-6)	9	38
Middle school/junior high (7-8 or 9)	23	25
High school (9 or 10-12)	2	11
Bilingual teacher	0	0
Remedial reading teacher	13	3
Remedial math teacher	1	1
Special education teacher	1	2
Substitute teacher	8	5
Resource specialist	2	2
Instructional aide or paraprofessional	25	7
Tutor supervisor	4	0
Paraprofessional tutor	9	4
Parent volunteer	4	1
Other	27	15
	N = 152	N = 168

Number of Years	Project	Nonproject
0	9	6
1-10	128	136
11-20	10	18
21-30	1	5
31-40	0	2
	N = 148	N = 167

82. What is your highest educational degree?

Degree	Project	Nonproject
None	0	3
Grade school (including junior high)	0	0
High school	37	7
Some college up to and including AA degree	19	4
Technical/Professional, Vocational degree (e.g., RN, LPN, CPA, etc.)	3	0
Completion of college (e.g., BA, BS, etc.)	77	159
Some graduate work	0	1
Masters degree or equivalent	33	65
Beyond Masters, ABD	0	0
Doctoral degree (e.g., PhD, EdD, JD, etc.)	0	0
	N = 169	N = 239

Year Degree Earned	Project	Nonproject
1920-1930	1	0
1931-1940	2	1
1941-1950	7	19
1951-1960	22	27
1961-1970	43	84
1971-1975	71	94
	N = 146	N = 225

83. How many years have you resided in or near this school district?

Years	Project	Nonproject
0	8	4
1-10	72	100
11-20	37	45
21-30	42	68
31-40	13	13
41-50	7	7
51-60	3	3
	N = 182	N = 240

84. How many years have you worked in this school district?

Years	Project	Nonproject
0	12	6
1-10	152	180
11-20	14	38
21-30	4	14
31-40	1	4
	N = 183	N = 242

85. Please enter your age and sex below:

Age	Project	Nonproject
17-20	11	0
21-30	100	107
31-40	36	56
41-50	22	38
51-60	12	32
61-65	2	6
	N = 183	N = 239

Sex		
Male	28	48
Female	157	191
	N = 185	N = 239

Appendix B

PROJECT INFORMATION PACKAGES FIELD TEST EVALUATION
ADMINISTRATIVE STAFF QUESTIONNAIRE

The technical appendix for the Administrative Staff Questionnaire is comprised of three parts: 1) a description of the respondent categories, 2) instructions for reading the data tables, and 3) the data itself.

ASQ Respondent Categories

Respondents were categorized as involved or not involved according to their responses on question one of the ASQ. Those checking a-e were considered involved while those checking f and g were considered not involved.

1. Which of the statements below most accurately describes your current involvement in the PIP project in your school district? (CHECK ONE)

    __a__ Directly involved in planning and administration of the overall project

    __b__ Directly and routinely involved in planning and administration of some aspects of the project

    __c__ Indirectly involved in planning and administration

    __d__ Involved in planning and administration on occasion, as needed

    __e__ Kept informed of activities and progress, but not otherwise involved

    __f__ Not involved at all

    __g__ Other (SPECIFY)________________________________

The following roles made up the four respondent categories:

- District administrators

District superintendent
Assistant superintendent
Director of federal programs
Language arts coordinator
Director of elementary education
Director of secondary education
Curriculum coordinator or specialist
Title I coordinator

Assistant Title I coordinator
Title III coordinator
Assistant Title III coordinator

- Project directors

PIP project director

- Principals

Building principal
Building vice principal

- Others

Administrative assistant
Evaluation staff
Counselor
School psychologist
Special education staff
Elementary level teacher
Secondary level teacher
Nurse
Librarian
Other

Instructions for Reading Tables

T = Total number of ASQs returned = 160

T_1 = Total number of involved ASQ respondents = 143 (not involved respondents = 17)

N_1 = Total number of involved district administrator respondents = 36

N_2 = Total number of involved project director respondents = 18

N_3 = Total number of involved principal respondents = 53

N_4 = Total number of involved other respondents = 36

N = Total number of respondents to each question, N does not include uncodeable or bad data, uninvolved respondents (except in univariate displays), and is broken down appropriately for each type of data display (e.g., univariate or by the four respondent categories)

1. Univariate displays include the total number of ASQ respondents (T) --involved and not involved respondents.

2. To find the percent responding to each item use N and the appropriate number of possible respondents for the item in calculations [e.g., in a univariate display the equation would be $\% = N(100)/T$].

3. To find the percentage of response type to each item use the appropriate total number of respondents in calculations [e.g., data displayed by the four types of involved respondents would use the indicated N_{1-4} above; the equation for involved district administrators would be $\% = N(100)/N_1$].

4. Data displayed for the open-ended questions represent the three most frequent responses made by all ASQ respondents (involved and not involved).

1. Which of the statements below most accurately describe your current involvement in the PIP project in your school district? (CHECK ONE)

	District Administrators	Project Directors	Principals	Others
A. Directly involved in planning and administration of the overall project	10	17	4	3
B. Directly and routinely involved in planning and administration of some aspects of the project	5	0	15	4
C. Indirectly involved in planning and administration	3	0	10	6
D. Involved in planning and administration on occasion, as needed	10	1	7	8
E. Kept informed of activities and progress, but not otherwise involved	8	0	17	15
F. Not involved at all	0	0	2	14
	N = 36	N = 18	N = 54	N = 50

2. About how much of your time is currently taken up with activities directly related to the PIP project?

	District Administrators	Project Directors	Principals	Others
All; assigned to the project on a full-time basis	0	10	0	10
Great deal	1	2	1	1
About half	3	6	11	7
Less than half	25	0	37	11
None; not involved with project activities	6	0	4	4
	N = 35	N = 18	N = 53	N = 33

3. Over the past several months, has your involvement with PIP project activities increased or decreased?

	District Administrators	Project Directors	Principals	Others
Increased a great deal	2	4	2	6
Increased some	1	2	9	5
Remained about the same	19	9	36	18
Decreased some	5	2	1	3
Decreased a great deal	9	1	3	3
	N = 36	N = 18	N = 51	N = 35

4. Please describe your own involvement in each of the activities listed below. Using the following scale, please assign a number to each item.

1 - was solely responsible for activity or assumed primary responsibility
2 - was actively involved
3 - was somewhat involved
4 - was kept informed of progress
5 - was not involved

	District Administrators						Project Directors						Principals						Others					
	1	2	3	4	5	N	1	2	3	4	5	N	1	2	3	4	5	N	1	2	3	4	5	N
A. Gathering information on the PIPs prior to decision to apply for grant	8	7	5	3	13	36	2	1	0	0	15	18	1	2	1	4	43	51	1	2	3	0	30	36
B. Making the initial decision to apply for a PIP	12	12	2	2	8	36	3	0	1	0	14	18	0	5	0	4	42	51	0	4	1	1	30	36
C. Preparing the grant application	6	5	9	4	12	36	3	0	0	0	15	18	1	0	0	5	45	51	1	3	0	1	31	36
D. Supplying additional data to USOE after the grant application had been submitted	9	7	7	2	11	36	2	0	1	1	14	18	1	3	1	4	42	51	0	3	1	1	31	36
E. Attending conference in Washington, D.C., to negotiate grant and prepare budget	14	4	4	0	14	36	1	0	1	0	16	18	1	1	0	0	49	51	0	0	2	0	34	36
F. Presenting project to the school board	13	14	2	1	6	36	1	1	2	0	14	18	0	2	1	3	45	51	0	0	1	4	30	35
G. Negotiating formal acceptance of the project	12	11	1	5	7	36	1	1	1	0	15	18	1	2	2	3	43	51	1	0	1	4	30	36
H. Recruiting and hiring project staff	5	12	9	4	7	37	4	7	3	1	2	17	3	11	5	6	26	51	0	1	4	5	26	36
I. Selecting schools to participate in the project	13	11	4	2	6	36	3	3	2	1	9	18	0	10	3	5	33	51	0	3	1	3	29	34
J. Training project staff	2	1	7	14	12	36	13	5	0	0	[illegible]	18	0	3	6	10	32	51	1	5	5	3	22	36

	District Administrators						Project Directors						Principals						Others					
	1	2	3	4	5	N	1	2	3	4	5	N	1	2	3	4	5	N	1	2	3	4	5	N
A. Presenting the project to personnel in target schools	5	4	6	10	11	36	11	4	0	0	3	18	2	10	10	7	23	52	1	3	3	7	22	34
B. Presenting the project to parents	0	3	8	11	14	36	11	4	3	0	0	15	2	12	25	4	9	52	0	6	10	2	18	36
C. Using news media to inform community about the project	5	7	10	3	11	36	8	4	3	1	1	17	0	7	7	8	29	51	0	3	3	9	21	34
D. Securing space for the project	17	6	8	2	3	36	3	8	2	1	4	18	20	14	6	5	8	53	0	4	2	6	24	36
E. Obtaining equipment needed for the project	5	9	8	10	4	36	13	5	0	0	0	18	3	6	14	12	17	52	1	7	3	4	21	36
F. Obtaining instructional materials needed for the project	5	7	7	12	5	36	13	5	0	0	0	18	1	4	15	12	21	53	1	6	4	5	19	36
G. Identifying students for participation in the project	0	3	7	15	11	36	3	10	2	0	3	18	4	22	13	9	5	53	0	7	7	4	18	36
H. Administering budget for project operations	4	9	3	9	11	36	14	2	2	0	0	18	1	3	1	8	38	51	1	1	3	3	28	36
I. Supervising activities of project staff	1	6	3	17	9	36	14	4	0	0	0	18	0	15	11	6	20	52	1	2	6	5	22	36
J. Documenting problems with the PIP materials	0	5	5	16	10	36	7	9	2	0	6	18	0	5	10	10	26	51	0	5	10	4	17	36
K. Preparing reports on progress of project implementation	0	1	3	18	14	36	11	5	2	0	0	18	0	3	8	10	30	51	2	8	9	3	14	36
L. Conducting local evaluation of the project	0	4	12	11	9	36	5	7	3	1	1	17	1	12	12	9	17	51	2	4	6	4	20	36
M. Recruiting a local evaluator	7	3	7	6	11	34	3	3	5	1	5	17	0	3	2	5	41	51	1	0	2	3	30	36
N. Contacting outside agencies (developer site, USOE, etc.) to request clarification or technical assistance on PIP components and operations	0	5	6	10	15	36	11	5	1	0	1	18	0	1	4	7	39	51	0	1	1	5	28	35
O. Maintaining contact with Title III project officers	4	4	9	10	9	36	7	6	1	2	2	18	0	8	6	5	33	52	1	3	4	4	24	34
P. Maintaining contact with other USOE staff	3	3	6	14	10	36	8	5	1	2	2	18	0	4	6	7	34	51	0	2	3	3	27	33
Q. Maintaining contact with SRI/RMC evaluation staff	0	1	9	16	10	36	12	5	0	1	0	18	0	7	8	8	28	51	0	3	8	4	20	35

5. If your district's PIP project continues next year, do you anticipate that your involvement is likely to change? (CHECK ONE)

	District Administrators	Project Directors	Principals	Others
I will be much more involved	4	2	2	2
I will be somewhat more involved	7	5	17	7
I will be involved at about the same level as I have been this year	23	10	29	21
I will be somewhat less involved	2	1	1	0
I will be much less involved	0	0	1	1
(No basis for answer)	0	0	3	4
	N = 36	N = 18	N = 53	N = 35

6. Approximately when did you first hear about the PIP project?

	District Administrators	Project Directors	Principals	Others
Before 1974	2	0	0	0
1974 Jan.-March	16	2	1	3
April-June	11	3	16	7
July-Sept.	4	11	27	21
Oct.-Dec.	0	0	4	1
1975 Jan.-March	0	0	1	1
April-June	0	0	2	0
July-Sept.	0	1	0	2
	N = 33	N = 17	N = 51	N = 35

7. Was this (CHECK ONE)

	District Administrators	Project Directors	Principals	Others
Prior to submission of the grant application	24	2	6	5
Following submission of the application but prior to notification of the award	4	3	5	0
Soon after notification of the award	3	9	18	11
During the early planning stages	2	2	8	9
After the project was underway	1	0	7	6
Do not know	2	1	9	5
	N = 36	N = 17	N = 53	N = 36

8. In general, how well do you understand the following aspects and objectives of the PIP project in your school district?

	District Administrators	Project Directors	Principals	Others
A. Goals and objectives of the project				
Very well	21	18	24	14
Well	11	0	22	13
Somewhat	2	0	5	5
Very little	1	0	2	4
Not at all	0	0	0	0
	N = 35	N = 18	N = 53	N = 34
B. Organization and management of the project				
Very well	26	17	25	10
Well	5	1	21	8
Somewhat	4	0	3	14
Very little	0	0	3	3
None at all	0	0	1	1
	N = 35	N = 18	N = 53	N = 34
C. Instructional techniques used in the project				
Very well	19	16	17	9
Well	6	2	28	8
Somewhat	7	0	6	14
Very little	2	0	1	3
None at all	1	0	1	2
	N = 35	N = 18	N = 53	N = 36

9. What are your principal sources of information about the PIP project? (CHECK ALL THAT APPLY)

	District Administrators			Project Directors			Principals			Others		
	Yes	No	N	Yes	No	N	Yes	No	N	Yes	No	N
A. Meetings with project staff	25	11	36	16	2	18	38	15	53	19	17	36
B. Informal discussions with project staff	29	7	36	16	2	18	49	4	53	30	6	36
C. Reports from students	12	24	36	10	8	18	24	29	53	18	18	36
D. Reports from parents	10	26	36	12	6	18	23	30	53	15	21	36
E. Materials contained in the PIP	22	14	36	18	0	18	30	23	53	25	11	36
F. Written progress reports prepared by project staff	19	17	36	13	5	18	31	22	53	18	18	36
G. News media	8	28	36	3	15	18	11	42	53	9	27	36
H. Personal observation of the instructional progress	27	9	36	16	2	18	47	6	53	24	12	36
I. Discussions with building principals	22	14	36	15	3	18	15	38	53	19	17	36

10. Which is the most useful or informative source?

1) Informal in-person contacts with project staff; informal discussions with staff (include project director, project staff, site assistant and sending teachers); informal discussions in general.
2) Involvement with the project; contact with instructional program (e.g., visit to a project classroom or laboratory); observation of the program.
3) Formal meetings with project staff and/or project director--meetings may not be preceded by "formal."

11. What is the least useful or informative source?

    1) News media.
    2) Reports from, contact with, parents (also absence of parent complaints).
    3) Reports from students.

12. What additional sources of information might have been useful for you?

    1) None; no other sources needed.
    2) Contacts with, or information from, originating site or other PIP (tryout) sites.
    3) Project/nonproject staff contacts (meetings, discussion, etc.); include any response that indicates personal contact with project and/or nonproject staff, school staff, principals, reading coordinator, tutors.

13. Many factors might influence the decision of school district personnel to apply for a PIP. Please read all the possible sources of influence listed below and rank their relative importance in your school district's decision to apply. Give the factor you believe had the strongest influence on the decision a "1." Give the second most influential factor a "2" and so on until you have assigned a number to each factor. The least influential factor should be assigned a "5."

	District Administrators						Project Directors						Principals						Others					
	1	2	3	4	5	No Basis	1	2	3	4	5	No Basis	1	2	3	4	5	No Basis	1	2	3	4	5	No Basis
A. Interest in starting a program to serve specific grade levels	7	14	10	2	1	1	0	9	5	2	0	2	6	21	16	5	1	4	4	12	9	4	1	5
B. Pressure from the community to raise test scores	1	2	6	7	18	1	0	1	2	7	6	2	2	6	4	21	14	4	1	2	3	10	14	5
C. Awareness of educational needs of the overall student population	19	9	5	1	0	1	10	5	0	1	0	2	36	9	2	1	0	4	19	7	2	1	0	4
D. Need to bring additional sources of revenue into the district	3	6	5	9	11	1	3	1	4	2	6	2	0	6	5	10	26	4	1	6	2	10	11	5
E. Interest in replicating a program that had already proven successful in another district	0	7	8	13	6	1	2	1	3	6	4	2	1	12	18	10	5	4	1	7	11	8	3	4

	District Administrators		Project Directors		Principals		Others	
	Yes	No	Yes	No	Yes	No	Yes	No
(If no basis for answer, please check here ____)	1	34	2	16	4	49	5	30
	N = 35		N = 18		N = 53		N = 35	

14. What other important factors led personnel in your district to apply for a PIP? Using the scale established in Question 13 above, please rate the relative importance of each of these additional factors.

1) No basis for answer; don't know.
2) Awareness of recognition of pupil needs; low pupil achievement; low test scores.
3) Interest in a specific program; help for pupils at particular grade levels; specific program features (e.g., individualized instruction) would benefit pupils.

15. When you first heard about the PIP project, how effective did you think it would be in terms of helping students?

	District Administrators	Project Directors	Principals	Others
Very effective	13	9	25	12
Effective	12	5	13	3
Somewhat effective	10	4	14	20
Not very effective	1	0	1	0
Not at all effective	0	0	0	0
	N = 36	N = 18	N = 53	N = 35

16. How has your opinion changed since then?

	District Administrators	Project Directors	Principals	Others
Much more positive now	16	9	21	12
More positive now	9	2	9	9
No change	10	7	22	13
Less positive now	1	0	1	1
Much less positive now	0	0	0	1
	N = 36	N = 18	N = 53	N = 36

17. If your initial opinion has changed, why?

1) Noticed that it looks like a good, effective program (no specific persons impacted); PIP program works; quality of staff (teachers and/or director); good structure, techniques, materials, management, or other program features--some indication of quality must be present.
2) More familiar with the project or PIP; know more about the program; have studied package; have been able to see project in operation.*
3) Noticed positive impacts on pupils; noticed positive impacts on pupil learning and achievement; have seen real learning taking place; comments from others.*

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*Items 2) and 3) have the same frequency of responses.

18. Below is a list of possible goals or objectives for the PIP project in your school district. Although each of these statements may describe a beneficial effect of the project, different people may have different opinions of how necessary attainment of each goal is to the success of the project. Using the following scale, please indicate how much importance you would give to each of these statements in judging the success of your school district's project:

1 - a primary goal; attainment is necessary for the project to be considered successful
2 - a secondary goal; attainment is important but not critical to the success of the project
3 - a possible side effect of the project

	District Administrators				Project Directors				Principals				Others			
	1	2	3	N	1	2	3	N	1	2	3	N	1	2	3	N
A. Improve reading skills of students in the project	34	1	1	36	17	1	0	18	50	2	1	53	30	4	0	34
B. Improve arithmetic skills of students in the project	20	3	12	35	8	3	7	18	20	11	20	51	11	13	10	34
C. Improve other academic skills of students in the project	8	22	6	36	4	12	2	18	15	26	12	53	8	19	7	34
D. Improve self-esteem or self-confidence of students in the project	22	11	3	36	17	1	0	18	42	8	3	53	20	11	3	34
E. Increase motivation of the students to learn	25	11	0	36	17	1	0	18	46	3	4	53	28	6	0	34
F. Reduce behavior problems	2	16	3	36	4	10	4	18	9	20	24	53	7	12	15	34
G. Reduce absenteeism	2	11	23	36	4	9	5	18	9	16	28	53	9	7	18	37
H. Improve student relationships	5	21	10	36	6	7	5	18	5	27	21	53	10	15	9	34
I. Provide individualized attention to students in need of special help	34	1	1	36	18	0	0	18	47	5	1	53	27	6	1	34
J. Provide additional resources (staff, equipment, materials) to the district	18	8	10	36	7	5	6	18	15	16	22	53	19	11	4	34
K. Reduce class size	9	7	20	36	2	9	7	18	2	12	39	53	8	5	20	33
L. Provide needed funds to the district	7	14	15	36	5	6	7	18	8	8	37	53	8	15	11	34
M. Install a lasting program	17	13	6	36	5	8	5	18	14	25	14	53	15	11	8	34
N. Develop experience and expertise that can be passed on to other teachers in this district	13	18	5	36	7	6	5	18	16	23	14	53	11	15	8	34
O. Develop experience and expertise that can be passed on to other districts	2	14	20	36	3	7	8	18	6	17	30	53	5	16	12	33
P. Improve school/community relations	8	15	13	36	6	8	4	18	13	24	16	53	8	16	10	34

19. Have any of the following groups visited project classrooms or laboratories during instructional periods? (CHECK ALL THAT APPLY)

		Univariate		
		Yes	No	N
A.	Nonproject teachers with students in the project	103	57	160
B.	Other teachers in project schools	79	80	160
C.	Teachers from nonproject schools	55	105	160
D.	Principals from project schools	100	60	160
E.	Principals from nonproject schools	41	119	160
F.	District administrative staff	113	47	160
G.	Parents of students in the project	115	45	160
H.	Other parents	53	107	160
I.	Representatives of local teachers association	39	121	160
J.	Members of the school board	49	111	160
K.	[No basis for answer]	24	136	160

20. Which of the following techniques have been used to describe the project to parents and other groups in the community? (CHECK ALL THAT APPLY)

		Univariate		
		Yes	No	N
A.	Letters to parents requesting permission for their children to participate	102	57	159
B.	Presentations at regular parent/teacher meetings (PTA)	98	62	160
C.	Presentations at PAC meetings	45	115	160
D.	Presentations at local teachers association meetings	48	112	160
E.	Presentations to interested community organizations (Lions Club, Rotary Club, etc.)	37	123	160
F.	Presentations to the school board	88	72	160
G.	News releases to local media	110	49	160
H.	Other news coverage	34	125	160
I.	Photo displays in banks, city offices, etc.	9	150	160
J.	Descriptive brochures mailed to parents or others in community	41	118	160
K.	Individual conferences between parents of participating students and project staff	110	50	160
L.	Open house at project school(s)	124	36	160
M.	Displays in project school(s) or school district office	57	103	160
N.	[No basis for answer]	12	148	160

21. How would you describe the initial reactions to the project of each group listed below? Use the following scale:

	Univariate						
	Highly Favorable	Somewhat Favorable	Neutral	Somewhat Opposed	Strongly Opposed	No Basis for Answer	N
A. Project staff	130	18	1	2	0	2	153
B. Other teachers in project schools	45	75	13	6	1	14	154
C. Principals in project schools	106	35	6	1	1	8	157
D. Students in the project	84	43	18	1	0	11	157
E. District administration	113	21	4	0	0	15	153
F. Local teachers association	28	41	18	0	0	55	142
G. School board	80	25	4	0	0	37	146
H. Parents	72	42	15	1	0	25	155

22. How have these reactions changed over the past few months? Use the following scale:

	Univariate				
	Grown More Favorable	No Change	Grown Less Favorable	No Basis for Answer	N
A. Project staff	84	58	0	11	153
B. Other teachers in project schools	83	46	2	20	151
C. Principals in project schools	79	62	2	11	154
D. Students in the project	92	50	1	11	154
E. District administration	63	56	0	28	147
F. Local teachers association	22	54	1	58	135
G. School board	38	56	0	45	139
H. Parents	87	32	0	28	147

23. Which of the following factors probably contributed to any resistance or negative reactions to the project from staff or community groups? (CHECK ALL THAT APPLY)

	Univariate					
	Staff			Community		
	Yes	No	N	Yes	No	N
A. Previous experience with special programs	20	138	158	18	140	158
B. Poor communications; people were not informed about the project	30	128	158	28	130	158
C. Presence of too many government programs in the community	11	147	158	5	153	158
D. Unfavorable publicity	2	156	158	1	157	158
E. Late start of the program	60	98	158	31	127	158
F. No resistance was encountered	51	107	158	65	93	158
G. Don't know	20	137	157	24	133	157

24. How can community acceptance of the project be improved? (CHECK ALL THAT APPLY)

	Univariate		
	Yes	No	N
A. Favorable publicity to the local press	104	48	152
B. Reports of positive findings	128	24	152
C. Invitations to parents or community groups to visit the project	110	42	152
D. Meetings to inform parents and others about the project	109	43	152

25. What other techniques or strategies would be likely to improve community acceptance of the project?

1) No basis for answer; don't know; ?; no comment.
2) None needed; community approves (responses emphasizing that a high level of support already exists and that other techniques are not needed); not applicable.
3) Evidence of project's effectiveness; reports of student progress; positive results from test scores; maintenance of quality of project, staff, etc. (e.g., hire well-respected teachers).

26. What aspects, if any, of the project appear to have produced a negative reaction on the part of nonproject staff? (CHECK ALL THAT APPLY)

		Univariate		
		Yes	No	N
A.	Lower class size for project teachers	34	123	157
B.	More classroom aides for project teachers	32	125	157
C.	Removing students from their classes for testing	24	133	157
D.	Removing students from their classes for instruction	32	125	157
E.	Waste of time and money on materials they consider outdated or otherwise inappropriate	5	152	157
F.	Additional burden (time and effort) to nonproject staff	6	151	157
G.	Frequent changes in schedule	29	128	157
H.	Extra time available to project teachers for planning and preparation	34	123	157
I.	Project staff are allowed more time off during the day	25	132	157
J.	Project staff are not responsible for lunchroom or playground duty	16	141	157
K.	No resistance was encountered	49	108	157
L.	Don't know	30	127	157

27. Have you talked about the project to parents of students who are currently participating in the project?

	District Administrators	Project Directors	Principals	Others
Yes	19	16	43	24
No (If No, please go on to Question 33)	16	2	10	12
	N = 35	N = 18	N = 53	N = 36

28. About how many parents have you talked to?

	Univariate
0	19
1-10	31
11-20	29
21-30	9
31-40	7
41-50	6
51-60	0
61-70	0
71-80	3
81-90	0
91-100	4
	N = 108

29. In what kinds of situations have you discussed the project with parents? (CHECK ALL THAT APPLY)

	District Administrators			Project Directors			Principals			Others		
	Yes	No	N	Yes	No	N	Yes	No	N	Yes	No	N
A. Individual conferences requested by parent	6	13	19	9	7	16	19	24	43	12	12	24
B. Individual conferences requested by teacher	3	16	19	6	10	16	15	28	43	7	17	24
C. Individual conferences at my request	5	14	19	5	11	16	16	27	43	8	16	24
D. PTA meetings	9	10	19	9	7	16	26	17	43	9	15	24
E. PAC meetings	8	11	19	5	11	16	6	37	43	5	19	24
F. Parent visits to the classroom during instruction	5	14	19	11	5	16	21	22	43	7	17	24
G. Other functions (open house, etc.)	16	3	19	13	3	16	31	12	43	14	10	24

30. What aspects of the project did you discuss with the parents?

	District Administrators			Project Directors			Principals			Others		
	Yes	No	N	Yes	No	N	Yes	No	N	Yes	No	N
A. Objectives of the project	16	3	19	16	0	16	35	8	43	19	5	24
B. Materials used in the project	13	6	19	15	1	16	23	20	43	15	9	24
C. Instructional techniques used in the project	15	4	19	16	0	16	29	14	43	13	11	24
D. How students were selected for participation	7	12	19	12	4	16	32	11	43	11	13	24
E. Special needs of the individual child	9	10	19	13	3	16	24	19	43	14	10	24
F. Progress of the individual child	4	15	19	13	3	16	26	17	43	17	7	24
G. Progress of project students in general	8	11	19	12	4	16	21	22	43	13	11	24

31. As far as you know, have any parents asked to have their children taken out of the project?

	District Administrators	Project Directors	Principals	Others
Yes	0	4	4	2
No (If No, please go on to Question 33)	20	12	39	22
	N = 20	N = 16	N = 43	N = 24

32. If you answered "Yes" to Question 31, please explain details briefly (how many and why).

Total Number of Parents or Children

1) One; request came from one parent only.
2) Two to five; requests from between two and five parents all together; requests from a couple of parents; requests from a few parents.

Disposition of Request

1) Child was allowed to remain in project (e.g., after the project was explained, parents agreed to have children stay in project).
2) Don't know; no basis for answer.

Reasons for Parent Requests

1) Don't know; no basis for answer.
2) Parent-initiated--concern about impact on other classes (parents felt children would get behind in math), missing too much of regular classes.
3) Parent-initiated--objections to having child singled out for special help (parents felt their children did not need the program); program not challenging; would be better in the regular classroom; did not need programs associated with the needy, disadvantaged, etc.; inappropriate selection of students.

33. Have you talked about the project with any other parents (i.e., those who do not have children in the project)?

	District Administrators	Project Directors	Principals	Others
Yes	18	14	32	18
No (If No, please go on to Question 35)	18	4	21	18
	N = 36	N = 18	N = 53	N = 36

34. As far as you know, have any of these parents asked to have their children enrolled in the project?

	District Administrators	Project Directors	Principals	Others
Yes	6	7	18	8
No	12	6	13	9
	N = 18	N = 13	N = 31	N = 17

35. Based on reports from parents and from other staff members, approximately how often have parents made the following comments about their children in the project? Use the following scale:

1 - constantly
2 - frequently
3 - occasionally
4 - seldom
5 - never

	District Administrators						Project Directors						Principals						Others					
	1	2	3	4	5	N	1	2	3	4	5	N	1	2	3	4	5	N	1	2	3	4	5	N
A. Children seem to enjoy coming to school more than they used to	1	13	9	1	1	25	1	7	8	1	0	17	1	16	17	5	7	46	4	14	9	0	6	33
B. Children are being given too many tests	0	2	2	4	17	25	0	1	1	3	10	15	1	0	4	11	30	46	0	2	4	3	20	29
C. Children seem to be falling behind in their subjects	0	0	1	5	19	25	0	0	2	4	10	16	0	1	5	11	28	45	1	1	1	7	23	23
D. Children are doing better in their school work and/or earning higher grades	2	16	3	1	3	25	1	8	6	2	0	17	1	18	18	4	5	46	2	14	12	1	4	33
E. Children seem to have better self-concepts	5	13	4	2	1	25	1	10	4	1	0	16	4	20	11	5	6	46	3	11	11	2	5	32
F. Children complain that they are assigned extra work by their other teachers when they miss class to participate in project related activities	0	0	2	6	17	25	0	0	3	1	12	16	0	1	2	10	32	45	0	2	3	6	19	30
G. Children seem to be more motivated to learn	8	11	5	0	1	25	4	10	3	0	0	17	5	21	15	3	3	47	4	15	8	2	3	32
H. Children do not like being in the project	0	0	0	3	22	25	0	0	0	6	10	16	0	0	4	11	31	46	0	0	1	11	20	32

36. What other comments have parents made about their children or about the PIP project?

1) Favorable comments about the program (not about results) or program features. Reactions favorable, enthusiastic, supportive, encouraging; parents pleased with project, glad to have it in school, happy to have their children in the project; grateful, positive, interested.

   Parents expect their children will be much better readers after the project is over.

   Good project for children who have a hard time learning; believe project is excellent means of helping students to learn to full capabilities; glad children getting extra help, individual attention they need. Wish children could have had the program sooner.

   Opportunity to explore and learn by design, more equipment and material to work with.

   Parents like the team situation where they can talk to a group of teachers all at once about their children; frequent parent conferences.

2) None; none in addition to those listed in previous question; haven't heard of any or not aware of any (if not additionally specified as "don't know"); confused about project.

3) Favorable comments about impacts on child attitudes.*

   Children enjoy coming to school more, feel better about school, more interested in school, have new interest in learning, experiencing success for the first time, children want more work.

   Children are making an effort to improve their reading; children are reading more at home.

   Tutors are proud of being able to help other students.

   Children enjoy going to the project, think lab is fun, don't even realize they are learning, have sense of being invited to participate in something special, enjoy program activities and methods:

   - Children are reading better; reading better orally; better able to read every day things; better able to select reading materials.

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*Items 3) and 4) have the same frequency of responses.

- Can see lots of learning taking place; growth in skills.

Pleased with results (unspecified); seems to be helping.

4) Too early to comment; does not apply; no basis for answer; don't know; don't remember; don't wish to respond; no answer; haven't talked to parents; cannot recall, do not discuss with parents; no ideas.*

---

*Items 3) and 4) have the same frequency of responses.

37. Approximately what proportion of students in the project have shown satisfactory improvement in each of the areas listed below? Use the following scale:

1 - all students in the project
2 - most students
3 - about half
4 - a few students
5 - no students
6 - no basis for answer

	Univariate						
	1	2	3	4	5	6	N
A. Reading skills	16	71	12	2	1	41	143
B. Arithmetic skills	7	36	8	10	2	72	135
C. Other academic skills	1	25	22	13	2	77	140
D. Self-esteem or self-confidence	8	62	24	5	1	43	143
E. Relationships with other students	4	57	20	10	2	50	143
F. Relationships with teaching staff in the project	32	62	8	3	0	14	145
G. Relationships with other teachers and aides	14	59	17	5	0	47	142
H. Relationships with other building staff (administrators, counselors, etc.)	9	59	13	7	0	52	140
I. Motivation to learn	17	68	12	6	1	39	143
J. Attendance	16	57	10	11	0	47	141
K. Behavior in the classroom	6	57	17	11	0	53	144
L. Behavior outside the classroom	1	43	18	10	1	68	141

38. What are your sources of information about the progress of students in the project? (CHECK ALL THAT APPLY)

	District Administrators			Project Directors			Principals			Others		
	Yes	No	N	Yes	No	N	Yes	No	N	Yes	No	N
A. Scores on tests given by project staff	19	15	34	16	2	18	31	21	52	16	17	33
B. Scores on tests given by other teachers	12	22	34	11	7	18	22	30	52	11	22	33
C. Scores on standardized tests	16	18	34	8	10	18	21	31	52	11	22	33
D. Personal observation of children participating in the project	24	10	34	18	0	18	48	4	52	20	13	33
E. Discussions with project director	32	2	34	2	16	18	37	15	52	21	12	33
F. Discussions with project teachers	29	5	34	18	0	18	49	3	52	27	6	33
G. Discussions with nonproject teachers	13	21	34	14	4	18	30	22	52	15	18	33
H. Discussions with principals	27	7	34	15	3	18	10	42	52	15	18	33
I. Reports from parents	13	21	34	15	3	18	22	30	52	13	20	33
J. Reports from students in the project	18	26	34	13	5	18	28	24	52	16	17	33

39. Have any members of the project staff requested to be transferred out of the project?

	District Administrators	Project Directors	Principals	Others
Yes	1	2	2	0
Uncertain	7	0	10	19
No	27	15	39	17
(If "Uncertain" or "No," please go on to Question 42)				
	N = 35	N = 17	N = 51	N = 36

40. How many?

	Univariate
1	4
2	1
	N = 5

41. What were their reasons?

1) Don't know; no basis for answer; cannot answer; does not apply.
2) Preferred classroom job; wanted to return to regular classroom; wanted a full-time position.*
3) Upset with project requirements or project procedures; role in project.*

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*Items 2) and 3) have the same frequency of responses.

42. Many different types of problems may arise when a new project is installed. Some of these problems are more serious than others. Please use the following scale to indicate the seriousness or severity of problems that occurred in each of the areas listed below:

1 - Very serious, severe problems
2 - Relatively serious problems
3 - Relatively minor problems
4 - Trivial problems
5 - No problems
6 - No basis for answer; not familiar with activities in this area

	District Administrators						Project Directors						Principals						Others					
	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
A. Obtaining formal approval for the project by the school board	0	0	2	1	30	1	0	0	2	1	10	5	2	2	0	4	22	21	0	0	3	1	9	20
B. Selection of schools for participation in the program	0	4	7	2	20	1	0	1	2	2	8	5	2	1	5	3	22	19	0	1	4	1	10	17
C. Recruitment of project director	0	2	5	4	22	1	0	0	2	1	6	7	2	1	3	4	21	21	0	0	2	2	11	17
D. Recruitment of other professional staff	0	3	12	5	14	1	0	4	3	2	7	1	1	2	9	7	18	15	1	0	7	1	11	13
E. Recruitment of paraprofessional staff	0	2	6	10	14	3	0	0	3	3	10	1	1	1	6	11	17	16	0	1	8	2	11	11
F. Securing classroom or other space in which to house the project	2	9	11	2	11	0	0	6	2	0	10	0	4	5	9	4	23	7	0	3	10	4	7	9
G. Obtaining equipment required for the project (e.g., desks, tables, carrels, shelving)	1	5	11	6	9	2	1	4	4	2	7	0	2	2	11	12	15	10	1	0	11	6	8	7
H. Obtaining instructional materials required for the project	0	10	8	7	7	2	2	2	8	1	5	0	1	8	12	8	12	11	1	2	6	5	9	9
I. Identification of students for participation	0	1	7	10	15	1	0	2	4	2	9	1	1	1	12	6	28	3	0	0	2	5	17	8
J. Developing schedules for students in the project and coordinating with regular schedules	0	5	14	5	4	5	4	3	4	4	3	0	3	2	18	12	14	3	0	5	9	7	5	7
K. Obtaining support and cooperation of district-level administrative staff	0	0	2	1	31	0	1	0	4	0	13	0	1	0	0	3	35	13	0	0	1	3	14	14
L. Obtaining cooperation of classroom teachers with students in the project	0	0	12	6	11	4	0	2	4	6	5	0	1	2	9	10	28	2	0	2	7	8	9	6
M. Securing permission from parents for their children to participate	0	0	2	3	21	7	0	0	1	5	11	1	0	0	4	10	32	5	0	0	1	8	15	8
N. Planning for staff training activities prior to start of instructional program	2	5	6	4	13	3	2	0	7	0	8	1	3	3	9	9	9	19	1	1	2	5	8	16

43. Several factors may have led to problems in installing the PIP project in your school district. Using the following guide, please indicate in Columns 1 through 3 major causes for problems encountered in the areas listed below. You may select more than one cause for a given type of problem. Check Column 4 if no problems arose in a given area; select Column 5 if you are not familiar with activities occurring in a particular area.

1 - Late start; lateness in notification of the grant award and receipt of package; problems would probably not arise if materials were received earlier
2 - Ambiguity in package; materials in the package did not explain the activity well enough
3 - Conflict with local conditions; procedures described in the package were either inappropriate for local needs or in direct conflict with normal district policies and procedures
4 - No problems; no difficulties were encountered in this activity
5 - No basis for answer; not familiar with activities or problems in this area

	District Administrators					Project Directors					Principals					Others				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
A. Obtaining formal approval from school board	2	1	0	29	3	1	1	0	9	7	4	0	0	27	21	4	1	0	10	20
B. Selection of schools	3	3	5	22	3	2	1	0	11	5	3	0	2	28	19	1	1	1	12	20
C. Recruitment of project staff	11	2	5	14	4	6	0	4	10	1	8	0	3	25	18	8	0	1	9	16
D. Securing space for project	9	0	8	18	2	6	1	0	11	1	5	0	11	29	9	5	1	2	15	13
E. Obtaining necessary equipment	21	2	1	7	4	12	2	2	4	1	16	1	2	24	11	12	1	3	10	10
F. Obtaining instructional materials	22	2	0	6	4	11	2	0	5	1	22	3	0	18	11	13	3	2	7	11
G. Identification of students	10	1	2	18	4	6	2	1	9	2	5	0	6	40	3	5	1	0	20	8
H. Planning for staff training prior to start of instruction	19	0	0	10	6	10	3	0	7	1	20	3	2	8	23	12	2	1	8	14
I. Coordinating student schedule	10	0	6	11	7	8	2	5	6	1	13	0	11	26	4	9	0	3	11	11

44. What other problems have arisen in connection with the project? Discuss their sources and severity (i.e., in terms of the scales used in Questions 42 and 43).

Problem

1) No problems, none, none in addition to those listed in previous question.
2) Problems in acquiring resources (staff, facilities, materials); required location/grouping of grades and/or classrooms; finding place for intensive involvement; sharing classroom with other staff members; availability of appropriate materials (e.g., materials had to be updated).*
3) No basis for answer; don't know; does not apply.*

Source

1) No problems.
2) Late start.
3) Conflict with local conditions.

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* Items 2) and 3) have the same frequency of responses.

45. The statements below describe possible benefits of the PIP project in your schools and some difficulties that may be associated with the project. Based on your experience over the past year, you will probably agree with some of the statements and disagree with others. Please indicate the response that most closely corresponds to your own opinions regarding benefits and difficulties associated with the PIP project.

	Univariate						
	Strongly Agree	Tend to Agree	Mixed Feelings	Tend to Disagree	Strongly Disagree	[No Basis for Answer]	N
A. Nonproject teachers need more information about project objectives	45	75	9	6	3	19	157
B. Participation in the project has made project staff more aware of student needs	76	56	3	3	0	18	156
C. Students are not given enough time for project-related activities	4	11	30	45	20	46	156
D. Project teachers share information regarding needs and progress of students in the project with other teachers	43	65	15	6	3	24	156
E. The project has resulted in increased parent involvement	22	50	21	21	11	30	155
F. Students in the project are given too many tests	7	12	26	30	30	51	156
G. Other teachers in the district would benefit from attending some of the training sessions held for project staff	46	64	14	2	1	29	156
H. The project does not serve the needs of participating students	1	2	3	27	105	17	155
I. Project activities are highly disruptive to regular classroom schedules	3	7	23	46	58	18	155
J. It is important for nonproject teachers to visit project classrooms or laboratories during instructional periods	49	57	24	3	1	21	155
K. Instructional materials used in the project are not compatible with the regular curriculum	1	6	16	47	62	25	157
L. Participation in the project has helped project staff to improve their classroom management skills	41	52	15	3	0	45	156
M. Students do not like being in the project	1	3	3	24	65	15	111
N. Too much project staff time is taken up with meetings and planning sessions	1	7	19	38	49	42	156
O. Communication between project and nonproject staff needs to be improved	20	58	27	24	6	20	155
P. Participation in the project has made project staff more effective as teachers	39	61	15	1	1	37	154
Q. Project students are missing critical activities in their other classes because of their participation in the project	3	7	21	52	51	22	156
R. Many nonproject teachers would like to use instructional materials like those in the project in their classrooms	31	63	14	2	2	44	156
S. Nonproject teachers share information regarding needs and progress of students in the project with project instructional staff	29	71	13	11	1	31	156
T. Project activities, including instruction, are interrupted too often by visitors to the classroom or laboratory	2	0	14	54	50	36	156
U. Nonproject teachers are often reluctant to release their students from other classes to participate in project-related activities	2	15	21	50	44	24	156
V. Participation in the project has exposed project staff to effective instructional techniques and strategies	51	63	9	1	1	30	155
W. Instructional materials used in the project are not suited to the ability level of the students	4	4	13	32	77	25	155
X. Nonproject teachers assign extra work to their students when they miss regular classroom time	0	6	8	40	56	45	155
Y. Many nonproject teachers would like to use instructional techniques and strategies like those in the project in their classrooms	30	59	15	4	0	47	155
Z. Project and nonproject staff have worked together to help make the project effective for students	32	77	24	3	4	15	155

46. In what ways do opinions of most of your colleagues differ from your opinions? (CHECK ONE)

	District Administrators	Project Directors	Principals	Others
Most others are much more positive	0	0	0	0
Most others are somewhat more positive	0	0	1	3
Most others share my opinions	30	15	38	18
Most others are somewhat more negative	0	2	2	2
Most others are much more negative	0	0	1	0
[No basis for answer]	6	1	11	11
	N = 36	N = 18	N = 53	N = 34

47. Please use the following scales to describe your general professional feelings about the PIP project in your school district.

	District Administrators	Project Directors	Principals	Others
Very positive	30	14	41	22
Somewhat positive	4	4	8	9
Neutral	1	0	1	3
Somewhat negative	0	0	2	0
Very negative	0	0	0	0
	N = 35	N = 18	N = 52	N = 34
Indifferent	0	0	0	0
Somewhat indifferent	0	0	2	1
Neutral	2	0	1	3
Somewhat enthusiastic	7	4	17	10
Enthusiastic	26	14	29	21
	N = 35	N = 18	N = 49	N = 35
Very supportive	32	16	42	25
Somewhat supportive	2	2	6	6
Neutral	0	0	1	3
Somewhat opposed	0	0	0	0
Very opposed	1	0	0	0
	N = 35	N = 18	N = 49	N = 34
Very warm	27	15	34	20
Somewhat warm	6	2	10	9
Neutral	2	1	1	3
Somewhat cool	0	0	2	1
Very cool	0	0	0	1
	N = 35	N = 18	N = 47	N = 34
Very dissatisfied	0	0	0	0
Somewhat dissatisfied	0	0	0	2
Neutral	1	0	2	4
Somewhat satisfied	7	6	16	10
Very satisfied	27	12	32	18
	N = 35	N = 18	N = 50	N = 34

48. Please use the following scales to describe your professional judgment of the PIP project as a method of teaching.

	District Administrators	Project Directors	Principals	Others
Very useful	29	16	39	23
Somewhat useful	6	2	11	9
Neutral	0	0	2	1
Somewhat useless	0	0	0	1
Very useless	0	0	0	0
	N = 35	N = 18	N = 52	N = 34
Very discouraging	0	0	0	0
Somewhat discouraging	0	0	0	1
Neutral	1	0	1	3
Somewhat promising	8	2	15	9
Very promising	25	16	33	21
	N = 34	N = 18	N = 49	N = 34
Very irrelevant	0	0	0	0
Somewhat irrelevant	0	0	0	0
Neutral	0	0	1	4
Somewhat relevant	8	1	13	9
Very relevant	27	17	34	20
	N = 35	N = 18	N = 48	N = 33
Very effective	21	17	31	20
Somewhat effective	12	0	15	9
Neutral	1	1	3	3
Somewhat ineffective	1	0	0	1
Very ineffective	0	0	0	1
	N = 35	N = 18	N = 49	N = 34
Very interesting	25	16	35	20
Somewhat interesting	8	2	10	10
Neutral	1	0	4	4
Somewhat dull	1	0	0	0
Very dull	0	0	0	0
	N = 35	N = 18	N = 49	N = 34

49. How relevant to the needs of your school is each of the aspects of your PIP project listed below?

	Univariate						
	Very Relevant	Somewhat Relevant	Neutral	Not Very Relevant	Not at All Relevant	No Basis for Answer	N
A. Staffing	90	31	5	1	2	10	139
B. Project organization and management	74	42	7	3	1	11	138
[illegible]. Criteria and procedures for selection of students	60	40	16	1	6	17	140
D. Curriculum (materials, equipment, etc.)	79	31	15	1	2	11	139
E. Instructional techniques	50	22	9	0	1	7	89
F. Student grouping patterns	58	43	17	3	2	17	140

50. How different is each of the aspects of your PIP project listed below from standard practices in your school?

	Very Different	Somewhat Different	Neutral	Not Very Different	Not at All Different	No Basis for Answer	N
A. Staffing	44	31	22	15	25	22	158
B. Organization and management	26	43	28	17	18	25	157
C. Curriculum (materials, equipment, etc.)	23	41	34	28	9	22	157
D. Instructional techniques	28	30	40	28	8	23	157
E. Student grouping patterns	33	16	34	28	20	26	157

51. To what extent would you support the PIP project in your district if asked about its merit?

	District Administrators	Project Directors	Principals	Others
Very much support	30	16	39	22
Somewhat support	2	2	10	10
Undecided	2	0	2	2
Not very much support	0	0	0	1
Not at all support	0	0	0	0
	N = 34	N = 18	N = 51	N = 35

52. Would you recommend the project to parents of students in need of special help in reading and/or math? (CHECK ONE)

	District Administrators	Project Directors	Principals	Others
Definately yes	33	18	44	25
Probably yes	2	0	7	7
Undecided	1	0	2	2
Probably no	0	0	0	1
Definately no	0	0	0	0
	N = 36	N = 18	N = 53	N = 35

53. Have you seen the orientation filmstrip which describes the PIP project?

	District Administrators	Project Directors	Principals	Others
Yes	22	17	26	18
Uncertain	1	0	2	2
No	13	1	25	15
	N = 36	N = 18	N = 53	N = 35

54. Have you seen the Project Information Package (the box) and/or any of its contents?

	District Administrators	Project Directors	Principals	Others
Yes	32	18	37	29
Uncertain	0	0	4	2
No	4	0	12	5
	N = 36	N = 18	N = 53	N = 36

55. Have you had a chance to read or study any of the materials in your school district's Project Information Package?

	District Administrators	Project Directors	Principals	Others
Yes	22	17	27	18
No (If No, please go on to Question 63)	14	0	26	17
	N = 36	N = 17	N = 53	N = 35

56. Below are listed the components of a Project Information Package. Please check each one that you have read or studied. For each component that you have checked, please rate its clarity, usability and effectiveness. Use the following scale:

Clarity

1) Very clear; can be understood easily.
2) Fairly clear.
3) Not at all clear; very confusing.

Usability

1) Very usable; procedures described were easy to implement.
2) Fairly usable; some procedures were difficult to implement.
3) Not at all usable; procedures were very difficult to implement or required major change.

Effectiveness

1) Very effective; procedures produced positive results.
2) Fairly effective; procedures had mixed results.
3) Not at all effective; procedures produced negative results.

		Univariate											
		Read or Studied			Clarity			Usability			Effectiveness		
		Yes	No	N	1	2	3	1	2	3	1	2	3
A.	Orientation filmstrip	64	22	86	35	22	1	30	25	1	23	32	0
B.	Project overview	71	15	86	38	22	2	34	29	0	29	31	0
C.	Project management directory	53	33	86	25	19	1	25	17	1	24	18	0
D.	Project management displays	43	43	86	25	14	0	19	15	4	16	21	1
E.	Staff qualifications and preparation checklist	57	29	86	39	11	1	30	22	0	26	24	0
F.	Inservice training guide	54	32	86	25	19	3	24	20	3	21	22	2
G.	Starter set: implementation	48	38	86	26	13	1	21	18	0	23	12	0
H.	Classroom management directory	39	47	86	17	16	0	13	19	1	10	20	2
I.	Student relationships album	37	49	86	18	15	0	15	15	2	15	15	1
J.	Professional relationships guide	43	43	86	25	15	0	20	18	1	19	19	1
K.	Hardware/software packet--catalogs and brochures	45	41	86	13	23	5	15	21	1	15	22	1
L.	Hardware/software packet--summary list of materials	43	43	86	14	20	5	10	23	2	13	21	2
M.	Hardware/software packet--information sheets, listing of publishers	42	44	86	17	14	6	14	19	1	14	18	2

57. How well is each of the following aspects of the project described in the PIP package?

A. Staffing

	District Administrators	Project Directors	Principals	Others
Very well	12	12	13	7
Fairly well	4	2	5	3
Undecided	3	2	1	3
Not very well	1	1	0	0
Not at all	0	0	0	0
No basis for answer	2	0	4	5
	N = 22	N = 17	N = 23	N = 18

B. Project organization and management

	District Administrators	Project Directors	Principals	Others
Very well	8	8	11	6
Fairly well	8	6	6	4
Undecided	3	2	2	2
Not very well	0	2	0	0
Not at all	0	0	0	0
No basis for answer	2	0	4	5
	N = 21	N = 18	N = 23	N = 17

C. Criteria and procedures for selection of students

	District Administrators	Project Directors	Principals	Others
Very well	7	6	7	5
Fairly well	7	6	9	4
Undecided	4	2	2	3
Not very well	0	2	0	0
Not at all	0	1	0	0
No basis for answer	2	1	5	5
	N = 20	N = 18	N = 23	N = 17

D. Curriculum (materials, equipment, etc.)

	District Administrators	Project Directors	Principals	Others
Very well	4	3	7	7
Fairly well	9	7	7	4
Undecided	4	5	4	2
Not very well	2	3	2	1
Not at all	0	0	0	0
No basis for answer	2	0	4	3
	N = 21	N = 18	N = 24	N = 17

E. Instructional techniques

	District Administrators	Project Directors	Principals	Others
Very well	2	4	6	7
Fairly well	13	3	8	3
Undecided	3	7	1	0
Not very well	0	3	1	2
Not at all	0	1	0	0
No basis for answer	2	0	7	5
	N = 20	N = 18	N = 23	N = 17

F. Student grouping patterns

	District Administrators	Project Directors	Principals	Others
Very well	7	4	4	4
Fairly well	7	6	10	4
Undecided	1	5	2	0
Not very well	1	2	0	2
Not at all	0	0	0	0
No basis for answer	4	0	7	7
	N = 20	N = 17	N = 23	N = 17

58. Which of the items listed below that are contained in the PIP package should be revised for use in the future? Use the following scale:

	Univariate				
	Adequate As Is	Requires Some Revision	Requires Extensive Revision	No Basis for Answer	N
A. Cross-referenced index for all nine components	15	16	7	33	71
B. Listing of essential hardware/software materials	15	19	13	26	73
C. Descriptions of hardware/software materials	13	17	17	26	73
D. Description of goals for all phases of the project	27	25	2	18	72
E. Description of hierarchical relationships among staff involved in the project	33	19	3	18	73
F. Description of specific responsibilities of each staff member	36	17	5	15	73
G. Sample lesson plans	11	28	7	27	73
H. Guidelines for quantities of specific materials required for use in the project	16	24	11	21	72
I. Guidelines for coordination of project activities with regular school activities	16	24	9	23	72

59. What other revisions or additions to materials contained in the package would you recommend?

1) None, none in addition to those listed in previous question.
2) No basis for answer; do not choose to reply; does not apply.
3) Revise or add to curriculum-materials-ordering specifications; more specific information regarding how to order materials; hardware/software booklet should describe materials more specifically; provide more detail on quantity of materials. Software edition should correspond with index/skill cards; update materials information; specific list of materials to begin program.

60. In general, how much adaptation to package guidelines in the following areas has been necessary to suit conditions or policies in your school district?

		None at All	Very Little	Some	Much	Very Much	No Basis for Answer	N
A.	Staffing	26	7	27	6	3	17	86
B.	Project organization and management	23	15	23	5	4	16	86
C.	Criteria or procedures for selection of students	40	9	16	4	0	17	86
D.	Curriculum (materials, equipment, etc.)	22	12	19	12	4	17	86
E.	Instructional techniques	18	23	14	11	4	16	86
F.	Student grouping patterns	17	19	19	10	2	18	85

61. How difficult has it been to fit the package guidelines to the needs of your school district?

	District Administrators	Project Directors	Principals	Others
Not at all difficult	8	7	9	5
Very little difficulty	6	8	9	3
Some difficulty	3	1	4	2
Difficult	1	2	1	0
Very difficult	0	0	1	0
No basis for answer	2	0	2	8
	N = 20	N = 18	N = 26	N = 18

62. On the whole, how much does the project in your district resemble the guidelines in the package?

	District Administrators	Project Directors	Principals	Others
Identical to package	6	5	4	2
Very similar to package	10	11	7	7
Somewhat similar to package	2	1	9	3
Different from package	1	0	2	0
Very different from package	0	1	0	1
No basis for answer	1	0	4	5
	N = 20	N = 18	N = 26	N = 18

63. Based on your experience over the past year, how necessary do you think technical assistance (i.e., clarification and advice from individuals or agencies outside the project that supplements materials in the PIP box) in each of the areas listed below would be to a district interested in using PIP materials to set up a project? Use the following scale:

1 - Vital; assistance would definitely be necessary
2 - Assistance would probably be necessary
3 - Uncertain
4 - Assistance would probably not be necessary
5 - Assistance would definitely not be necessary
6 - No basis for answer

	District Administrators						Project Directors						Principals						Others					
	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
A. During preliminary planning	20	11	0	2	0	2	5	7	2	2	2	0	25	10	4	1	1	11	13	6	4	0	2	7
B. Hiring project staff	1	2	4	13	13	2	0	1	2	8	7	0	3	7	5	24	2	11	4	6	7	5	2	9
C. Training project staff	5	12	3	6	7	2	2	5	2	6	3	0	11	13	6	9	2	11	7	10	3	3	2	8
D. Selecting and ordering appropriate materials	3	9	7	8	5	3	0	5	2	7	4	0	6	15	5	14	1	11	4	14	2	1	1	9
E. Identifying student participants	2	1	6	12	12	2	0	3	0	9	6	0	0	8	2	25	8	9	1	6	6	9	3	8
F. Coordinating project activities with regular school schedules	3	3	0	16	11	2	0	5	1	5	7	0	0	5	6	22	10	9	1	8	5	7	4	8
G. Conducting diagnostic testing	4	5	1	12	11	2	0	3	4	5	6	0	6	10	4	13	8	11	5	6	3	6	3	10
H. Using specific instructional materials	2	13	4	8	5	3	0	2	3	7	6	0	5	12	7	13	4	11	3	9	7	2	3	9

64. What groups or individuals do you think would be appropriate sources of technical assistance at various stages in project implementation? (CHECK ALL THAT APPLY)

	District Administrators			Project Directors			Principals			Others		
	Yes	No	N	Yes	No	N	Yes	No	N	Yes	No	N
A. During preliminary planning--i.e., identification of goals and needed resources												
• Developer site	20	16	36	15	3	18	24	22	46	17	13	30
• PIP packager	23	13	36	10	8	18	26	21	47	15	15	30
• Government sponsor	14	22	36	7	11	18	15	32	47	7	23	30
• Publishers of educational materials	9	27	36	6	12	18	19	28	47	3	27	30
B. During project start-up--i.e., acquisition of resources, staff training, selection of students												
• Developer site	23	13	36	11	7	18	23	24	47	15	15	30
• PIP packager	17	19	36	4	14	18	26	21	47	16	14	30
• Government sponsor	3	33	36	4	14	18	11	36	47	4	26	30
• Publishers of educational materials	10	26	36	9	9	18	14	33	47	11	19	30
C. During project operations--i.e., after the instructional component of the project is underway												
• Developer site	15	21	36	15	3	18	15	32	47	14	16	30
• PIP packager	20	16	36	6	12	18	25	22	47	14	16	30
• Government sponsor	12	24	36	6	12	18	10	37	47	6	24	30
• Publishers of educational materials	14	22	36	9	9	18	11	36	47	8	22	30

65. Suppose that personnel in other districts wanted to set up a project like your school district's PIP project. If visits to your school or some other school in which the project was already operating were possible, when would they be most useful? Please assign the most useful time for a visit a "1," the second most useful time a "2," the third most useful time a "3," and the least useful time a "4."

	District Administrators				Project Directors				Principals				Others			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
A. Prior to deciding to set up the project	13	10	1	11	6	2	2	8	22	9	0	17	9	5	0	18
B. During preliminary planning, i.e., determining objectives; identifying needed (staff, materials, equipment)	7	17	7	4	7	7	3	1	4	31	11	3	4	17	11	1
C. During project start-up--i.e., obtaining resources, selecting students for participation, training staff	1	14	16	4	1	6	8	3	1	19	24	5	3	13	15	2
D. During project operations--i.e., once the instructional phase of the project was underway	6	9	4	16	4	3	4	7	13	8	5	23	9	12	2	10

66. What other forms of assistance (consultants, etc.) would be needed by personnel in another district if they wanted to set up a project similar to yours?

1) No basis for answer; don't know.
2) None; no help needed.
3) Personal contacts with developer site or other PIP sites (consultant from developer or originating site; meetings with staff from other sites, resource person from another site); visit another project site.*
4) Unspecified consultants or resource personnel; someone familiar with the program; PIP consultants.*

67. If your district's PIP was widely available (i.e., to other schools in your district or to other districts), would you recommend it to your colleagues?

	District Administrators	Project Directors	Principals	Others
Definitely yes	30	16	36	16
Probably yes	2	1	12	14
Undecided	3	0	5	5
Probably no	1	1	0	0
Definitely no	0	0	0	0
	N = 36	N = 18	N = 53	N = 35

68. Are you familiar with other PIPs?

	Univariate
Yes	28
No (If No, please go on to Question 71)	130
	N = 158

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*Items 3) and 4) have the same frequency of responses.

69. Would you recommend other PIPs over the one being implemented in your district?

	District Administrators	Project Directors	Principals	Others
Definitely yes	1	0	1	0
Probably yes	1	1	0	0
Undecided	8	3	1	0
Probably no	5	2	2	0
Definitely no	1	1	0	1
	N = 16	N = 7	N = 4	N = 1

70. Why or why not?

1) Happy, interested in this PIP; program successful, effective, works, very good, valuable; well managed program (no specific impacts indicated).
2) No basis for response; not prepared to respond; don't know; too early to tell; reserving judgment; not familiar with other PIPs.
3) Positive impact on student learning; meeting children's educational needs; improved reading and/or math skills; advantage to children; children learn at their own level.*
4) Programs serve different needs and there are good points in each.*

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*Items 3) and 4) have the same frequency of responses.

71. What do you think have been the most positive results of the PIP project?

1) Improved attitudes toward school and learning (e.g., motivation, self-image; behavior, experience of success, students enjoy coming to school), improvement in interest to read, less absenteeism.
2) Student improvement in academic skills (e.g., progress in reading or math).
3) Increased recognition of individual student needs (individualized diagnosis and/or instruction; individual needs are better met; staff is more aware of student needs; teachers know students better, learning disabilities recognized.

72. What do you think have been the most serious problems connected with the PIP project?

1) Late start of program; late and inadequate preparation; initial problems of organization, planning.
2) Materials were received late or were unavailable.
3) None; no problems.

73. If you had a free hand, what types of changes to the project would you make in the areas listed below?

A. Staffing

1) None, no change (no favorable comments).
2) No basis for response.
3) Expand staff (e.g., add full-time supervisor; assistant to project officer; add clerical staff; more aides; more full-time teachers, tutors, consultants), parent volunteers, student aides.

B. Project organization and management

1) None; no changes (no favorable comments).
2) Don't know; no basis for response.
3) Preliminary planning, orientation and start-up (e.g., begin earlier; better orientation prior to project implementation; long-range planning before school starts).

C. Curriculum (materials, equipment, etc.)

1) None; no changes (no favorable comments).
2) No basis for answer, don't know.
3) Better explanation of curriculum needed; clarify.

D. Criteria and procedures for selection of students

1) None; no change (no favorable comments).
2) No basis for response.
3) None; no change (with favorable comments).*
4) Allow more students into the program (no change in criteria specified).*

E. Instructional techniques

1) None; no change (no favorable comments).
2) No basis for response.
3) None; no change (with favorable comments).

F. Student grouping patterns

1) No change (no favorable comments).
2) No basis for response.
3) No change (with favorable comments).

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*Items 3) and 4) have the same frequency of responses.

74. Please enter the code for the title which best describes your current major (i.e., 50% or more time) administrative responsibility.

	Involved and Not Involved			
	District Administrators	Project Directors	Principals	Others
District superintendent	13	0	0	0
Assistant superintendent	7	0	0	0
Director of federal programs	4	0	0	0
Language arts coordinator	2	0	0	0
Director of elementary education	2	0	0	0
Director of secondary education	1	0	0	0
Curriculum coordinator or specialist	4	0	0	0
Title I coordinator	3	0	0	0
Assistant Title I coordinator	0	0	0	0
Title III coordinator	0	0	0	0
Assistant Title III coordinator	0	0	0	0
Administrative assistant	0	0	0	3
PIP project director	0	18	0	0
Building principal	0	0	46	0
Building vice principal	0	0	9	0
Evaluation staff	0	0	0	2
Counselor	0	0	0	8
School psychologist	0	0	0	2
Special education staff	0	0	0	0
Elementary level teacher	0	0	0	0
Secondary level teacher	0	0	0	0
Nurse	0	0	0	3
Librarian	0	0	0	0
Other	0	0	0	31
	N = 36	N = 18	N = 55	N = 50

75. By the end of the current school year, how many years will you have held this responsibility?

	Involved and Not Involved			
	District Administrators	Project Directors	Principals	Others
1-10	34	17	40	41
11-20	2	0	12	7
21-30	0	0	3	2
	N = 36	N = 17	N = 55	N = 50

76. If you occupy more than one administrative post, please enter the codes, the percent of your time devoted to each, and the number of years you have occupied that post.

	Involved and Not Involved			
Assignment	District Administrators	Project Directors	Principals	Others
District superintendent	0	0	0	0
Assistant superintendent	1	0	0	0
Director of federal programs	1	2	1	0
Language arts coordinator	2	0	0	0
Director of elementary education	1	1	0	0
Director of secondary education	0	0	0	0
Curriculum coordinator or specialist	1	0	0	0
Title I coordinator	8	1	0	0
Assistant Title I coordinator	0	0	0	0
Title III coordinator	1	1	0	0
Assistant Title III coordinator	1	1	0	0
Administrative assistant	0	1	0	2
PIP project director	0	3	0	0
Building principal	0	2	6	0
Building vice principal	0	0	0	0
Evaluation staff	0	0	0	1
Counselor	0	0	1	1
School psychologist	0	0	0	1
Special education staff	0	0	0	0
Elementary level teacher	0	1	1	1
Secondary level teacher	0	0	1	0
Nurse	0	0	0	0
Librarian	0	0	0	0
Other	1	3	0	3
	N = 14	N = 17	N = 10	N = 9

	Involved and Not Involved			
% of Time	District Administrators	Project Directors	Principals	Others
0-10	2	0	3	0
11-20	0	0	0	0
21-30	3	4	0	1
31-40	0	0	0	0
41-50	1	12	2	4
51-60	0	0	0	0
61-70	1	2	0	0
71-80	3	1	0	2
	N = 10	N = 19	N = 7	N = 7

	Involved and Not Involved			
Years in Post	District Administrators	Project Directors	Principals	Others
0	1	0	0	0
1-10	13	21	5	8
11-20	0	0	3	1
21-30	0	0	2	0
31-40	0	0	1	0
	N = 14	N = 27	N = 11	N = 9

77. Please enter the code from above which best describes your immediate previous assignment.

Assignment	District Administrators	Project Directors	Principals	Others
	Involved and Not Involved			
District superintendent	4	0	0	0
Assistant superintendent	3	0	0	0
Director of federal programs	0	0	0	0
Language arts coordinator	2	0	0	0
Director of elementary education	0	0	0	0
Director of secondary education	0	0	0	0
Curriculum coordinator or specialist	1	0	1	0
Title I coordinator	0	2	0	1
Assistant Title I coordinator	0	0	0	0
Title III coordinator	0	0	1	0
Assistant Title III coordinator	0	0	0	0
Administrative assistant	0	0	3	2
PIP project director	0	2	0	0
Building principal	14	1	11	0
Building vice principal	0	0	10	0
Evaluation staff	0	0	0	0
Counselor	0	0	3	0
School psychologist	0	0	0	0
Special education staff	0	1	0	1
Elementary level teacher	2	3	15	4
Secondary level teacher	1	4	8	8
Nurse	0	0	0	1
Librarian	0	0	0	1
Other	7	5	3	16
	N = 34	N = 18	N = 55	N = 31

Number of Years	District Administrators	Project Directors	Principals	Others
	Involved and Not Involved			
0	0	0	1	0
1-10	26	17	39	26
11-20	8	1	13	7
21-30	0	0	1	0
31-40	0	0	1	0
	N = 34	N = 18	N = 55	N = 33

78. What is your highest educational degree?

Degree	Involved and Not Involved District Administrators	Project Directors	Principals	Others
None	0	0	0	2
Grade school (including junior high)	0	0	0	0
High school	0	0	0	12
Some college up to and including AA degree	1	0	1	6
Technical/Professional, Vocational degree (e.g., RN, LPN, CPA, etc.)	0	0	0	0
Completion of college (e.g., BA, BS, etc.)	1	3	1	3
Some graduate work	0	0	0	0
Masters degree or equivalent	19	15	51	16
Beyond Masters, ABD	0	0	0	0
Doctoral degree (e.g., PhD, EdD, JD, etc.)	14	0	1	3
	N = 35	N = 18	N = 54	N = 42

Year Degree Earned	Involved and Not Involved District Administrators	Project Directors	Principals	Others
1931-1940	0	0	0	3
1941-1950	3	0	3	3
1951-1960	10	1	16	5
1961-1970	12	9	28	15
1971-1975	11	8	6	5
	N = 36	N = 18	N = 53	N = 31

79. Are you certified?

	Involved and Not Involved District Administrators	Project Directors	Principals	Others
Yes	36	18	55	23
No	0	0	0	25
	N = 36	N = 18	N = 55	N = 48

80. How many years have you resided in or near this school district?

	Involved and Not Involved			
No. of Years	District Administrators	Project Directors	Principals	Others
0	0	0	1	1
1-10	14	8	10	9
11-20	7	1	17	8
21-30	6	6	14	11
31-40	5	0	5	10
41-50	2	3	4	5
51-60	2	0	3	4
61-70	0	0	1	0
	N = 36	N = 18	N = 55	N = 49

81. How many years have you worked in this school district?

	Involved and Not Involved			
No. of Years	District Administrators	Project Directors	Principals	Others
0	1	0	0	0
1-10	19	12	13	30
11-20	9	5	23	15
21-30	7	1	16	6
31-40	0	0	3	1
	N = 36	N = 18	N = 55	N = 52

82. Please enter your age and sex below:

	Involved and Not Involved			
Age	District Administrators	Project Directors	Principals	Others
20-30	0	2	3	9
31-40	9	9	10	14
41-50	17	4	24	13
51-60	8	3	15	13
61-70	1	0	3	1
	N = 35	N = 18	N = 55	N = 50

	Involved and Not Involved			
Sex	District Administrators	Project Directors	Principals	Others
Male	30	6	39	8
Female	6	12	15	42
	N = 36	N = 18	N = 54	N = 50

Appendix C

IMPACTS ON INSTRUCTIONAL STAFF--DIMENSIONS OF INTEREST

To describe the impacts of the PIP project on instructional staff, we formed the following dimensions of interest: project acceptability, perceived positive and negative impacts on students, training received by project staff, positive and negative impacts on nonproject staff, difficulty of implementation, familiarity with programs and packages, and assessment of the packages. Within each dimension we created two or more variables from items in the ISQ. Then we aggregated responses made by project and nonproject instructional staff on the selected items to get the values of the variables. These values, variables and dimensions were presented in a table format (Tables 37-46) in Chapter IV. The following pages describe how the variables that made up each dimension were formed in terms of the combination of ISQ items included. The "Item #" column refers to the ISQ item, the "Item" column illustrates the wording of the ISQ item, and the "Scaling" column presents the scale used by respondents to rate a particular item ("no basis for answer" responses were excluded).

PROJECT ACCEPTABILITY DIMENSION (Table 37)

(VARIABLE 1) Respondent Assessment: Negative (1) - Positive (5)

Item #	Item	Scaling
49m	Students do not like being in the project.	Strongly agree - Strongly disagree
52a	Describe your professional judgment of the PIP project as a method of teaching.	Useful - Useless
52b	Describe your professional judgment of the PIP project as a method of teaching.	Discouraging - Promising
52c	Describe your professional judgment of the PIP project as a method of teaching.	Irrelevant - Relevant
52d	Describe your professional judgment of the PIP project as a method of teaching.	Effective - Ineffective
52e	Describe your professional judgment of the PIP project as a method of teaching.	Interesting - Dull

(VARIABLE 2) Respondent Affect: Positive (1) - Negative (5)

Item #	Item	Scaling
51a	Describe your general professional feelings about the PIP project in your school district.	Positive - Negative
51b	Describe your general professional feelings about the PIP project in your school district.	Indifferent - Enthusiastic
51c	Describe your general professional feelings about the PIP project in your school district.	Supportive - Opposed
51d	Describe your general professional feelings about the PIP project in your school district.	Warm - Cool
51e	Describe your general professional feelings about the PIP project in your school district.	Dissatisfied - Satisfied

(VARIABLE 3) Project Relevance: Positive (1) - Negative (5)

Item #	Item	Scaling
53	Relevance of the following PIP aspects to school needs:	
53a	Staffing	Very relevant - Not at all relevant
53b	Project organization and management	Very relevant - Not at all relevant

VARIABLE 3 (Continued)

Item #	Item	Scaling
53c	Criteria and procedures for selection of students.	Very relevant - Not at all relevant
53d	Curriculum (materials, equipment, etc.).	Very relevant - Not at all relevant
53e	Instructional techniques.	Very relevant - Not at all relevant
53f	Student grouping patterns.	Very relevant - Not at all relevant

(VARIABLE 4) Continue Methods and Materials: Positive (1) - Negative (4)

Item #	Item	Scaling
55	If you had your choice, would you: (project staff only)	1 - Continue to use instructional methods and materials in PIP 2 - Make some changes in methods or materials 3 - Make many changes in methods or materials 4 - Not use the instructional methods and materials recommended in the PIP at all

(VARIABLE 5) Support Project: Positive (1) - Negative (5)

Item #	Item	Scaling
56	To what extent would you support the PIP project if asked about its merit?	Very much - Not at all

(VARIABLE 6) Recommend to Colleagues: Positive (1) - Negative (5)

Item #	Item	Scaling
71	If your school's PIP was widely available, would you recommend it to your colleagues?	Definitely yes - Definitely no

(VARIABLE 7) Recommend to Parents: Positive (1) - Negative (5)

Item #	Item	Scaling
58	Would you recommend the project to parents of students in need of special help in reading and/or math?	Definitely yes - Definitely no

PERCEIVED POSITIVE IMPACTS ON STUDENTS DIMENSION (Table 38)

(VARIABLE 1) Academic Impacts: Positive (1) - Negative (5)

Item #	Item	Scaling
48	Proportion of students who are in the project who have shown satisfactory improvement in the following areas:	
48a	Reading skills.	All students - No students
48b	Arithmetic skills.	All students - No students
48c	Other academic skills.	All students - No students

(VARIABLE 2) Motivation: Positive (1) - Negative (5)

Item #	Item	Scaling
48d	Self-esteem or self-confidence.	All students - No students
48i	Motivation to learn.	All students - No students
48j	Attendance.	All students - No students

(VARIABLE 3) Behavior Range: Positive (1) - Negative (5)

Item #	Item	Scaling
48d	Self-esteem or self-confidence.	All students - No students
48e	Relationships with other students.	All students - No students
48f	Relationships with teaching staff in the project.	All students - No students
48g	Relationships with other teachers and aides.	All students - No students
48h	Relationships with other building staff.	All students - No students
48k	Behavior in the classroom.	All students - No students
48l	Behavior outside the classroom.	All students - No students

(VARIABLE 4) Positive Impacts: Positive (1) - Negative (5)

Item #	Item	Scaling
48a	Reading skills.	All students - No students
48b	Arithmetic skills.	All students - No students
48c	Other academic skills.	All students - No students
48d	Self-esteem or self-confidence.	All students - No students
48e	Relationships with other students.	All students - No students
48f	Relationships with teaching staff in the project.	All students - No students
48g	Relationships with other teachers and aides.	All students - No students
48h	Relationships with other building staff.	All students - No students
48i	Motivation to learn.	All students - No students
48j	Attendance.	All students - No students
48k	Behavior in the classroom.	All students - No students
48l	Behavior outside the classroom.	All students - No students

PERCEIVED NEGATIVE IMPACTS ON STUDENTS DIMENSION (Table 39)

(VARIABLE 1) Negative Impacts: Negative (1) - Positive (5)

Item #	Item	Scaling
49c	Students are not given enough time for project-related activities.	Strongly agree - Strongly disagree
49h	The project does not serve the needs of participating students.	Strongly agree - Strongly disagree
49k	Instructional materials used in the project are not compatible with the regular curriculum.	Strongly agree - Strongly disagree

(VARIABLE 2) Disruptions: Negative (1) - Positive (5)

Item #	Item	Scaling
49i	Project activities are highly disruptive to regular classroom schedules.	Strongly agree - Strongly disagree
49q	Project students are missing critical activities in their other classes because of their participation in the project.	Strongly agree - Strongly disagree
49t	Project activities, including instruction, are interrupted too often by visitors to the classroom or laboratory.	Strongly agree - Strongly disagree
49u	Nonproject teachers are often reluctant to release their students from other classes to participate in projected-related activities.	Strongly agree - Strongly disagree
49x	Nonproject teachers assign extra work to their students when they miss regular classroom time.	Strongly agree - Strongly disagree

TRAINING RECEIVED BY PROJECT STAFF DIMENSION (Table 40)

(VARIABLE 1) Extent of Training: Great Deal (1) - None (3)

Item #	Item	Scaling
7a(1)	Use of specific curriculum materials.	A great deal of training - No training
7b(1)	Use of special equipment.	A great deal of training - No training
7c(1)	Use and interpretation of diagnostic tests.	A great deal of training - No training
7d(1)	Classroom management skills, including working with paraprofessional aides and tutors.	A great deal of training - No training
7e(1)	Working with small groups of children.	A great deal of training - No training
7f(1)	Working with children individually.	A great deal of training - No training
7g(1)	Selection of curriculum materials.	A great deal of training - No training
7h(1)	Arrangement of the instruction environment.	A great deal of training - No training
7i(1)	Use of rewards to motivate student learning.	A great deal of training - No training
7j(1)	Use of gaming and simulation techniques.	A great deal of training - No training
7k(1)	Strategies for instruction in basic skill areas.	A great deal of training - No training
7l(1)	Maintaining discipline and control in the classroom.	A great deal of training - No training
7m(1)	Involvement of parents in the education of their children.	A great deal of training - No training

(VARIABLE 2) Adequacy of Training: Very (1) - Not At All (3)

Item #	Item	Scaling
7a(2)	Use of specific curriculum materials.	Very adequate - Not at all adequate
7b(2)	Use of special equipment.	Very adequate - Not at all adequate
7c(2)	Use and interpretation of diagnostic.	Very adequate - Not at all adequate

VARIABLE 2 (Continued)

Item #	Item	Scaling
7d(2)	Classroom management skills, including working with paraprofessional aides and tutors.	Very adequate - Not at all adequate
7e(2)	Working with small groups of children.	Very adequate - Not at all adequate
7f(2)	Working with children individually.	Very adequate - Not at all adequate
7g(2)	Selection of curriculum materials.	Very adequate - Not at all adequate
7h(2)	Arrangement of the instructional environment.	Very adequate - Not at all adequate
7i(2)	Use of rewards to motivate student learning.	Very adequate - Not at all adequate
7j(2)	Use of gaming and simulation techniques.	Very adequate - Not at all adequate
7k(2)	Strategies for instruction in basic skill areas.	Very adequate - Not at all adequate
7l(2)	Maintaining discipline and control in the classroom.	Very adequate - Not at all adequate
7m(2)	Involvement of parents in the education of their children.	Very adequate - Not at all adequate

(VARIABLE 3) Relevance of Training: Very (1) - Not At All (3)

Item #	Item	Scaling
7a(3)	Use of specific curriculum materials.	Very relevant - Not at all relevant
7b(3)	Use of special equipment.	Very relevant - Not at all relevant
7c(3)	Use and interpretation of diagnostic tests.	Very relevant - Not at all relevant
7d(3)	Classroom management skills, including working with paraprofessional aides and tutors.	Very relevant - Not at all relevant
7e(3)	Working with small groups of children.	Very relevant - Not at all relevant
7f(3)	Working with children individually.	Very relevant - Not at all relevant

VARIABLE 3 (Continued

Item #	Item	Scaling
7g(3)	Selection of curriculum materials.	Very relevant - Not at all relevant
7h(3)	Arrangement of the instructional environment.	Very relevant - Not at all relevant
7i(3)	Use of rewards to motivate student learning.	Very relevant - Not at all relevant
7j(3)	Use of gaming and simulation techniques.	Very relevant - Not at all relevant
7k(3)	Strategies for instruction in basic skill areas.	Very relevant - Not at all relevant
7l(3)	Maintaining discipline and control in the classroom.	Very relevant - Not at all relevant
7m(3)	Involvement of parents in the education of their children.	Very relevent - Not at all relevant

POSITIVE IMPACTS ON PROJECT STAFF DIMENSION (Table 41)

(VARIABLE 1) Positive Impacts Project Staff: Positive (1) - Negative (5)

Item #	Item	Scaling
49b	Participation in the project has made project staff more aware of student needs.	Strongly agree - Strongly disagree
49e	The project has resulted in increased parent involvement.	Strongly agree - Strongly disagree
49l	Participation in the project has helped project staff to improve their classroom management skills.	Strongly agree - Strongly disagree
49v	Participation in the project has exposed project staff to effective instructional techniques and strategies.	Strongly agree- Strongly disagree
49p	Participation in the project has made project staff more effective as teachers.	Strongly agree- Strongly disagree

(VARIABLE 2) Project/Nonproject Cooperation: Positive (1) - Negative (5)

Item #	Item	Scaling
49d	Project teachers share information regarding needs and progress of students in the project with other teachers.	Strongly agree - Strongly disagree
49s	Nonproject teachers share information regarding needs and progress of students in the project with project instructional staff.	Strongly agree - Strongly disagree
49z	Project and nonproject staff have worked together to help make the project effective for students.	Strongly agree - Strongly disagree

POSITIVE IMPACTS ON NONPROJECT STAFF DIMENSION (Table 42)

(VARIABLE 1) Current Reactions of Staff: More Positive (1) - More Negative (3)

Item #	Item	Scaling
33	How reactions to the project have changed.	
33a	Project staff.	Grown more favorable - Grown less favorable
33b	Other teachers in project schools.	Grown more favorable - Grown less favorable
33c	Principals in the project.	Grown more favorable - Grown less favorable
33e	District administrators.	Grown more favorable - Grown less favorable

(VARIABLE 2) Project/Nonproject Staff Cooperation: Positive (1) - Negative (5)

Item #	Item	Scaling
49d	Project teachers share information regarding needs and progress of students in the project with other teachers.	Strongly agree - Strongly disagree
49s	Nonproject teachers share information regarding needs and progress of students in the project with project instructional staff.	Strongly agree - Strongly disagree
49z	Project and nonproject staff have worked together to help make the project effective for students.	Strongly agree - Strongly disagree

(VARIABLE 3) Nonproject Staff Interest: Positive (1) - Negative (5)

Item #	Item	Scaling
49r	Many nonproject teachers would like to use instructional materials like those in the project in their classrooms.	Strongly agree - Strongly disagree
49y	Many nonproject teachers would like to use instructional techniques and strategies like those in the project in their classrooms.	Strongly agree - Strongly disagree

NEGATIVE IMPACTS ON NONPROJECT STAFF DIMENSION (Table 43)

(VARIABLE 1) Disruptions: Low (1) - High (5)

Item #	Item	Scaling
49i	Project activities are highly disruptive to regular classroom schedules.	Strongly agree - Strongly disagree
49q	Project students are missing critical activities in their other classes because of their participation in the project.	Strongly agree - Strongly disagree
49t	Project activities, including instruction, are interrupted too often by visitors to the classroom or laboratory.	Strongly agree - Strongly disagree
49u	Nonproject teachers are often reluctant to release their students from other classes to participate in project-related activities.	Strongly agree - Strongly disagree
49x	Nonproject teachers assign extra work to their students when they miss regular classroom time.	Strongly agree - Strongly disagree

(VARIABLE 2) Negative Features-A: Low (0) - High (1)

Item #	Item	Scaling
37	Aspects of projects that appear to have produced a negative reaction on the part of nonproject staff:	
37a	Lower class size for project teachers.	Not checked - Checked
37b	More classroom aides for project teachers.	Not checked - Checked
37c	Removing students from their classes for testing.	Not checked - Checked
37d	Removing students from their classes for instruction.	Not checked - Checked
37e	Waste of time and money on materials they consider outdated or otherwise inappropriate.	Not checked - Checked

(VARIABLE 3) Negative Features-B: Low (0) - High (1)

Item #	Item	Scaling
37f	Additional burden (time and effort) to nonproject staff.	Not checked - Checked
37g	Frequent changes in schedule.	Not checked - Checked

VARIABLE 3 (Continued)

Item #	Item	Scaling
37h	Extra time available to project teachers for planning and preparation.	Not checked - Checked
37i	Project staff are allowed more time off during the day.	Not checked - Checked
37j	Project staff are not responsible for lunchroom or playground duty.	Not checked - Checked

(VARIABLE 4) Improved Communications Needed: Agree (1) - Disagree (5)

Item #	Item	Scaling
49a	Nonproject teachers need more information about project objectives.	Strongly agree - Strongly disagree
49o	Communications between project and nonproject staff needs to be improved.	Strongly agree - Strongly disagree

DIFFICULTY OF IMPLEMENTATION: RESEMBLANCE TO GUIDELINES DIMENSION (Table 44)

(VARIABLE 1) Differences From Standard Procedures: High (1) - Low (5)

Item #	Item	Scaling
54	Difference between PIP project and standard practices in your school.	
54a	Staffing.	Very different - Not at all different
54b	Project organization and management.	Very different - Not at all different
54c	Curriculum (materials, equipment, etc.).	Very different - Not at all different
54d	Instructional techniques.	Very different - Not at all different
54e	Student grouping patterns.	Very different - Not at all different

(VARIABLE 2) Adaptation: None (1) - A Great Deal (5)

Item #	Item	Scaling
66	Adaptation necessary to package guidelines to suit local conditions or policies in your school district.	
66a	Staffing.	None at all - Very much
66b	Project organization and Management.	None at all - Very much
66c	Criteria or procedures for selection of students.	None at all - Very much
66d	Curriculum (materials, equipment, etc.).	None at all - Very much
66e	Instructional techniques	None at all - Very much
66f	Student grouping patterns	None at all - Very much

(VARIABLE 3) Difficulty of Adaptation: Not At All (1) - Very (5)

Item #	Item	Scaling
67	How difficult has it been to fit the package guidelines to the needs of your school?	Not at all difficult - Very difficult

(VARIABLE 4) Disruption: High (1) - Low (5)

Item #	Item	Scaling
49i	Project activities are highly disruptive to regular classroom schedules.	Strongly agree - Strongly disagree
49q	Project students are missing critical activities in their other classes because of their participation in the project.	Strongly agree - Strongly disagree
49t	Project activities, including instruction, are interrupted too often by visitors to the classroom or laboratory.	Strongly agree - Strongly disagree
49u	Nonproject teachers are often reluctant to release their students from other classes to participate in project-related activities.	Strongly agree - Strongly disagree
49x	Nonproject teachers assign extra work to their students when they miss regular classroom time.	Strongly agree - Strongly disagree

(VARIABLE 5) Resemblance to Guidelines: High (1) - Low (5)

Item #	Item	Scaling
68	On the whole, how much does the project in your district resemble the guidelines in the package?	Identical to package - Very different from package

FAMILIARITY WITH PROGRAMS AND PACKAGES DIMENSION (Table 45)

(VARIABLE 1) Understanding of Project: High (1) - Low (3)

Item #	Item	Scaling
19a	Goals and objectives of the project.	Very well - Not at all
19b	Organization and management of the project.	Very well - Not at all
19c	Instructional techniques used in the project.	Very well - Not at all

VARIABLE 2) Orientation Filmstrip: Seen (1) - Not Seen (3)

Item #	Item	Scaling
59	Have you seen the orientation filmstrip which describes the PIP project?	Yes - No

(VARIABLE 3) Seen PIP Box: Seen (1) - Not Seen (3)

Item #	Item	Scaling
60	Have you seen the Project Information Package (the box) and/or any of its contents?	Yes - No

(VARIABLE 4) Read/Studied PIP Materials: Read (1) - Not Read (3)

Item #	Item	Scaling
61	Have you had a chance to read or study any of the materials in your school's Project Information Package?	Yes - No

(VARIABLE 5) Amount of Package Read: None (0) - All (1)

Item #	Item	Scaling
62a	Orientation filmstrip.	Not read or studied - Read or studied
62b	Project overview.	Not read or studied - Read or studied
62c	Project management displays.	Not read or studied - Read or studied
62d	Staff qualifications and preparation checklist.	Not read or studied - Read or studied

VARIABLE 5 (Continued)

Item #	Item	Scaling
62e	Inservice training guide.	Not read or studied - Read or studied
62f	Starter set: Implementation.	Not read or studied - Read or studied
62g	Classroom management directory.	Not read or studied - Read or studied
62h	Student relationships album.	Not read or studied - Read or studied
62i	Professional relationships guide.	Not read or studied - Read or studied
62j	Hardware/software packet--catalogs and brochures.	Not read or studied - Read or studied
62k	Hardware/software packet--summary list of materials.	Not read or studied - Read or studied
621	Hardware/software packet--information sheets, listing of publishers.	Not read or studied - Read or studied

ASSESSMENT OF THE PACKAGES DIMENSION (Table 46)

(VARIABLE 1) Package Clarity: High (1) - Low (3)

Item #	Item	Scaling
62a	Orientation filmstrip.	Very clear - Not at all clear
62b	Project overview.	Very clear - Not at all clear
62c	Project management directory.	Very clear - Not at all clear
62d	Project management displays.	Very clear - Not at all clear
62e	Staff qualifications and preparation checklist.	Very clear - Not at all clear
62f	Inservice training guide.	Very clear - Not at all clear
62g	Starter set: implementation.	Very clear - Not at all clear
62h	Classroom management directory.	Very clear - Not at all clear
62i	Student relationships album.	Very clear - Not at all clear
62j	Professional relationships album.	Very clear - Not at all clear
62k	Hardware/software packet--catalogs and brochures.	Very clear - Not at all clear
62l	Hardware/software packet--summary list of materials.	Very clear - Not at all clear
62m	Hardware/software packet--information sheets, listing of publishers.	Very clear - Not at all clear

(VARIABLE 2) Package Usability/Effectiveness: High (1) - Low (3)

Item #	Item	Scaling
62a	Orientation filmstrip.	Very usable/effective - Not at all usable/effective
62b	Project overview.	Very usable/effective - Not at all usable/effective

VARIABLE 2 (Continued)

Item #	Item	Scaling
62c	Project management directory.	Very usable/effective - Not at all usable/ effective
62d	Project management displays.	Very usable/effective - Not at all usable/ effective
62e	Staff qualifications and preparation checklist.	Very usable/effective - Not at all usable/ effective
62f	Inservice training guide.	Very usable/effective - Not at all usable/ effective
62g	Starter set: implementation.	Very usable/effective - Not at all usable/ effective
62h	Classroom management directory.	Very usable/effective - Not at all usable/ effective
62i	Student relationships album.	Very usable/effective - Not at all usable/ effective
62j	Professional relationships guide.	Very usable/effective - Not at all usable/ effective
62k	Hardware/software packet--catalogs and brochures.	Very usable/effective - Not at all usable/ effective
62l	Hardware/software packet--summary list of materials.	Very usable/effective - Not at all usable/ effective
62m	Hardware/software packet--information sheets, listing of publishers.	Very usable/effective - Not at all usable/ effective

(VARIABLE 3) Package Description: High (1) - Low (5)

Item #	Item	Scaling
63	Adequacy of description of PIP aspects.	
63a	Staffing.	Very well - Not at all
63b	Project organization and management.	Very well - Not at all

VARIABLE 3 (Continued)

Item #	Item	Scaling
63c	Criteria and procedures for selection of students.	Very well - Not at all
63d	Curriculum (materials, equipment, etc.).	Very well - Not at all
63e	Instructional techniques.	Very well - Not at all
63f	Student grouping patterns.	Very well - Not at all

(VARIABLE 4) Extent of Revision: Low (1) - High (3)

Item #	Item	Scaling
64a	Cross-referenced index for all nine components.	Adequate as is - Requires extensive revision
64b	Listing of essential hardware/software materials.	Adequate as is - Requires extensive revision
64c	Descriptions of hardware/software materials.	Adequate as is - Requires extensive revision
64d	Description of goals for all phases of the project.	Adequate as is - Requires extensive revision
64e	Description of hierarchical relationships among staff involved in the project.	Adequate as is - Requires extensive revision
64f	Description of specific responsibilities of each staff member.	Adequate as is - Requires extensive revision
64g	Sample lesson plans.	Adequate as is - Requires extensive revision
64h	Guidelines for quantities of special materials required for use in the project.	Adequate as is - Requires extensive revision
64i	Guidelines for coordination of project activities with regular school activities.	Adequate as is - Requires extensive revision

Appendix D

SAMPLE PIP OBSERVATION INSTRUMENT (R-3)

Sequence Number

PIP INSTRUCTIONAL OBSERVATION INSTRUMENT R-3

Date ____________________

Observer/Reporter ____________________

Other Observer ____________________

Start of Observation ____________________

Site ____________________

School ____________________

Teacher(s) Present
____
title code
____
title code

Aide(s) Present
____
title code
____
title code

Subject Matter Reading ____ Math ____ Social Studies ____ Other ____

No. of Pupils Enrolled ________

No. of Pupils Present ________

Duration of Instructional Period ________ (no. of min.)

Refer to Previous Sequence Number

MATERIALS AND RESOURCES

R-3

Classroom Features

Noise Level ___ : ___ : ___ : ___ : ___ (acoustically dead … very noisy)

Lighting ___ : ___ : ___ : ___ : ___ (excellent … poor)

Heating and Ventilation ___ : ___ : ___ : ___ : ___ (very comfortable … very uncomfortable)

Space ___ : ___ : ___ : ___ : ___ (uncluttered … crowded)

Attractiveness ___ : ___ : ___ : ___ : ___ (high … low)

Furniture

3 = adequate
2 = inadequate
1 = not present

- Pupil desks ___
- Carrels ___
- Tables ___
- Teacher's desk ___
- Aide's desk ___
- Filing cabinet ___
- Bookshelves ___
- Blackboards ___
- Bulletin boards ___
- Carpet ___
- Learning centers ___
- Storage cabinets ___
- Other (specify) ___
- ____________ ___
- ____________ ___

Equipment {Check if Present}

- Film projector ___
- TV ___
- Radio ___
- Phonograph ___
- Earphones ___
- Calculators ___
- Teaching machines ___
- Other (specify)
- ____________ ___
- ____________ ___
- ____________ ___
- ____________ ___
- ____________ ___
- ____________ ___

Classroom Displays {Check if Present}

- Pupil work ___
- Progress charts ___
- Art, pictures ___
- Reading displays ___
- Math displays ___
- Soc.Studies " ___
- Other academic ___
- Ethnic groups ___
- Other nonacademic ___
- Project ident. ___
- Other (specify) ___
- ____________ ___
- ____________ ___
- ____________ ___
- ____________ ___

INSTRUCTIONAL EPISODE

Start of
Observation ______
time

Diagram of Classroom

O = pupil

ⓧ = teacher

X = aide

▭ = table

◡ = desk

⊓ = carrell

TM = teaching machine

LC = learning center

S = storage cabinet

1 = primary site visitor

2 = associate site visitor

Observer Comments:

R-3

End of observation ________
time

Pupil and Instructor Activities Checklist (3=freq. 2=occas. 1=never)

	PUPIL ACTIVITY CODES	
A	Taking written test	
B	Taking oral quiz	
C	Recording progress/contracts	
D	Worksheets/workbooks	
E	Silent reading (books, etc.)	
F	Reading aloud	
G	Writing, composition	
H	Flashcards, drill	
IM	Working with materials/games	
IS	Working with self-instruction materials	
J	Using typewriters, teaching machines, equipment	
K	Listening, watching	
L	Storytelling, drama	
MG	Group games	
MS	Gaming and simulation	
N	Disruptive behavior	
ZA	Discussion, academic	
ZN	Discussion, nonacademic	
ZZ	Idle	

	INSTRUCTOR ACTIVITY CODES	Tchr.	Aide
O	Testing/diagnosing		
P	Reviewing/evaluating		
Q	Assigning/prescribing/directions		
R	Watching/monitoring		
S	Lecturing		
T	Demonstrating/explaining reading aloud		
U	Drilling		
V	Questioning/prompting		
W	Operating AV equipment		
X	Assisting with materials, equip.		
YG	Group games		
YS	Gaming and simulation		
ZA	Discussion, academic		
ZB	Discussion, behavior & disc.		
ZN	Discussion, other nonacademic		
ZS	Discussion with other staff		
ZT	Classroom management, admin.		
ZZ	Idle		

	Code	% time
Pupil most dominant activity		
Pupil other dominant activities		
Pupil minimum activity		

	Code	% time
Tchr. most dominant activity		
Tchr. other dominant activities		
Tchr. minimum activity		
Aide most dominant activity		
Aide other dominant activities		
Aide minimum activity		

	Large Group	Small Group	Pairs	Individual Child
Percent of pupil time				
Percent of teacher time				
Percent of aide time				

Observer comments:

R-3

Teacher Behaviors (3 = frequently, 2 = occasionally, 1 = never)

	Teacher	Aide
Checks pupil progress	____	____
Prompts by questioning	____	____
Praises pupil work	____	____
Acknowledges pupil ideas/contributions	____	____
Rephrases so pupils understand	____	____
Uses open-ended questions	____	____
Allows pupils to question	____	____
Encourages pupils to question	____	____
Discredits pupils	____	____
Laughs with pupils	____	____
Circulates	____	____
Sits with individual pupils	____	____

Pupil Behaviors (3 = frequently, 2 = occasionally, 1 = never)

Pupils appear confused ____
Pupils fool around ____
Pupils attend to task ____
Pupils work on different materials/contracts ____
Pupils respond positively to adults ____
Pupils work independently ____
Pupils ask for help from adults ____

Observer Comments:

R-3

Teacher Characteristics

Clear ____ : ____ : ____ : ____ : ____ Vague
Confident ____ : ____ : ____ : ____ : ____ Unsure
Pleasant ____ : ____ : ____ : ____ : ____ Harsh
Patient ____ : ____ : ____ : ____ : ____ Abrupt
Controlling ____ : ____ : ____ : ____ : ____ Indulgent
Enthusiastic ____ : ____ : ____ : ____ : ____ Indifferent
Organized ____ : ____ : ____ : ____ : ____ Disorganized
Rewarding ____ : ____ : ____ : ____ : ____ Punitive
Structured ____ : ____ : ____ : ____ : ____ Unstructured
Professional ____ : ____ : ____ : ____ : ____ Unprofessional
Stimulating ____ : ____ : ____ : ____ : ____ Dull
Responsive ____ : ____ : ____ : ____ : ____ Unresponsive

Aide Characteristics

Clear ____ : ____ : ____ : ____ : ____ Vague
Confident ____ : ____ : ____ : ____ : ____ Unsure
Patient ____ : ____ : ____ : ____ : ____ Abrupt
Enthusiastic ____ : ____ : ____ : ____ : ____ Indifferent
Cooperative ____ : ____ : ____ : ____ : ____ Reluctant
Organized ____ : ____ : ____ : ____ : ____ Disorganized
Responsive ____ : ____ : ____ : ____ : ____ Unresponsive
Professional ____ : ____ : ____ : ____ : ____ Unprofessional

Pupil Characteristics

Confident ____ : ____ : ____ : ____ : ____ Confused
Cooperative ____ : ____ : ____ : ____ : ____ Disruptive
Satisfied ____ : ____ : ____ : ____ : ____ Frustrated
Enthusiastic ____ : ____ : ____ : ____ : ____ Passive
Attentive ____ : ____ : ____ : ____ : ____ Restless

Comments:

R-3

INSTRUCTIONAL EPISODE

Start of Observation ________
time

Diagram of Classroom

O = pupil
ⓧ = teacher
X = aide

▭ = table
◡ = desk
⊓ = carrell

TM = teaching machine
LC = learning center
S = storage cabinet

1 = primary site visitor
2 = associate site visitor

Observer Comments:

R-3

End of observation ________
time

Pupil and Instructor Activities Checklist (3=freq. 2=occas. 1=never)

PUPIL ACTIVITY CODES

A	Taking written test	
B	Taking oral quiz	
C	Recording progress/contracts	
D	Worksheets/workbooks	
E	Silent reading (books, etc.)	
F	Reading aloud	
G	Writing, composition	
H	Flashcards, drill	
IM	Working with materials/games	
IS	Working with self-instruction materials	
J	Using typewriters, teaching machines, equipment	
K	Listening, watching	
L	Storytelling, drama	
MG	Group games	
MS	Gaming and simulation	
N	Disruptive behavior	
ZA	Discussion, academic	
ZN	Discussion, nonacademic	
ZZ	Idle	

	Code	% time
Pupil most dominant activity		
Pupil other dominant activities		
Pupil minimum activity		

INSTRUCTOR ACTIVITY CODES

		Tchr.	Aide
O	Testing/diagnosing		
P	Reviewing/evaluating		
Q	Assigning/prescribing/directions		
R	Watching/monitoring		
S	Lecturing		
T	Demonstrating/explaining reading aloud		
U	Drilling		
V	Questioning/prompting		
W	Operating AV equipment		
X	Assisting with materials, equip.		
YG	Group games		
YS	Gaming and simulation		
ZA	Discussion, academic		
ZB	Discussion, behavior & disc.		
ZN	Discussion, other nonacademic		
ZS	Discussion with other staff		
ZT	Classroom management, admin.		
ZZ	Idle		

	Code	% time
Tchr. most dominant activity		
Tchr. other dominant activities		
Tchr. minimum activity		
Aide most dominant activity		
Aide other dominant activities		
Aide minimum activity		

	Large Group	Small Group	Pairs	Individual Child
Percent of pupil time				
Percent of teacher time				
Percent of aide time				

Observer comments:

R-3

Teacher Behaviors (3 = frequently, 2 = occasionally, 1 = never)

	Teacher	Aide
Checks pupil progress	____	____
Prompts by questioning	____	____
Praises pupil work	____	____
Acknowledges pupil ideas/contributions	____	____
Rephrases so pupils understand	____	____
Uses open-ended questions	____	____
Allows pupils to question	____	____
Encourages pupils to question	____	____
Discredits pupils	____	____
Laughs with pupils	____	____
Circulates	____	____
Sits with individual pupils	____	____

Pupil Behaviors (3 = frequently, 2 = occasionally, 1 = never)

Pupils appear confused	____
Pupils fool around	____
Pupils attend to task	____
Pupils work on different materials/contracts	____
Pupils respond positively to adults	____
Pupils work independently	____
Pupils ask for help from adults	____

Observer Comments:

R-3

Teacher Characteristics

Clear _____ : _____ : _____ : _____ : _____ Vague
Confident _____ : _____ : _____ : _____ : _____ Unsure
Pleasant _____ : _____ : _____ : _____ : _____ Harsh
Patient _____ : _____ : _____ : _____ : _____ Abrupt
Controlling _____ : _____ : _____ : _____ : _____ Indulgent
Enthusiastic _____ : _____ : _____ : _____ : _____ Indifferent
Organized _____ : _____ : _____ : _____ : _____ Disorganized
Rewarding _____ : _____ : _____ : _____ : _____ Punitive
Structured _____ : _____ : _____ : _____ : _____ Unstructured
Professional _____ : _____ : _____ : _____ : _____ Unprofessional
Stimulating _____ : _____ : _____ : _____ : _____ Dull
Responsive _____ : _____ : _____ : _____ : _____ Unresponsive

Aide Characteristics

Clear _____ : _____ : _____ : _____ : _____ Vague
Confident _____ : _____ : _____ : _____ : _____ Unsure
Patient _____ : _____ : _____ : _____ : _____ Abrupt
Enthusiastic _____ : _____ : _____ : _____ : _____ Indifferent
Cooperative _____ : _____ : _____ : _____ : _____ Reluctant
Organized _____ : _____ : _____ : _____ : _____ Disorganized
Responsive _____ : _____ : _____ : _____ : _____ Unresponsive
Professional _____ : _____ : _____ : _____ : _____ Unprofessional

Pupil Characteristics

Confident _____ : _____ : _____ : _____ : _____ Confused
Cooperative _____ : _____ : _____ : _____ : _____ Disruptive
Satisfied _____ : _____ : _____ : _____ : _____ Frustrated
Enthusiastic _____ : _____ : _____ : _____ : _____ Passive
Attentive _____ : _____ : _____ : _____ : _____ Restless

Comments:

R-3

INSTRUCTIONAL EPISODE

Start of
Observation ____________
time

Diagram of Classroom

0 = pupil
Ⓧ = teacher
X = aide

☐ = table
◡ = desk
⊓ = carrell

TM = teaching machine
LC = learning center
S = storage cabinet

1 = primary site visitor
2 = associate site visitor

Observer Comments:

R-3

End of observation ______
time

Pupil and Instructor Activities Checklist (3=freq. 2=occas. 1=never)

PUPIL ACTIVITY CODES

A	Taking written test	
B	Taking oral quiz	
C	Recording progress/contracts	
D	Worksheets/workbooks	
E	Silent reading (books, etc.)	
F	Reading aloud	
G	Writing, composition	
H	Flashcards, drill	
IM	Working with materials/games	
IS	Working with self-instruction materials	
J	Using typewriters, teaching machines, equipment	
K	Listening, watching	
L	Storytelling, drama	
MG	Group games	
MS	Gaming and simulation	
N	Disruptive behavior	
ZA	Discussion, academic	
ZN	Discussion, nonacademic	
ZZ	Idle	

	Code	% time
Pupil most dominant activity		
Pupil other dominant activities		
Pupil minimum activity		

INSTRUCTOR ACTIVITY CODES

		Tchr.	Aide
O	Testing/diagnosing		
P	Reviewing/evaluating		
Q	Assigning/prescribing/directions		
R	Watching/monitoring		
S	Lecturing		
T	Demonstrating/explaining reading aloud		
U	Drilling		
V	Questioning/prompting		
W	Operating AV equipment		
X	Assisting with materials, equip.		
YG	Group games		
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ZA	Discussion, academic		
ZB	Discussion, behavior & disc.		
ZN	Discussion, other nonacademic		
ZS	Discussion with other staff		
ZT	Classroom management, admin.		
ZZ	Idle		

	Code	% time
Tchr. most dominant activity		
Tchr. other dominant activities		
Tchr. minimum activity		
Aide most dominant activity		
Aide other dominant activities		
Aide minimum activity		

	Large Group	Small Group	Pairs	Individual Child
Percent of pupil time				
Percent of teacher time				
Percent of aide time				

Observer comments:

R-3

Teacher Behaviors (3 = frequently, 2 = occasionally, 1 = never)

	Teacher	**Aide**
Checks pupil progress	____	____
Prompts by questioning	____	____
Praises pupil work	____	____
Acknowledges pupil ideas/contributions	____	____
Rephrases so pupils understand	____	____
Uses open-ended questions	____	____
Allows pupils to question	____	____
Encourages pupils to question	____	____
Discredits pupils	____	____
Laughs with pupils	____	____
Circulates	____	____
Sits with individual pupils	____	____

Pupil Behaviors (3 = frequently, 2 = occasionally, 1 = never)

Pupils appear confused ____

Pupils fool around ____

Pupils attend to task ____

Pupils work on different materials/contracts ____

Pupils respond positively to adults ____

Pupils work independently ____

Pupils ask for help from adults ____

Observer Comments:

R-3

Teacher Characteristics

Clear ____ : ____ : ____ : ____ : ____ Vague
Confident ____ : ____ : ____ : ____ : ____ Unsure
Pleasant ____ : ____ : ____ : ____ : ____ Harsh
Patient ____ : ____ : ____ : ____ : ____ Abrupt
Controlling ____ : ____ : ____ : ____ : ____ Indulgent
Enthusiastic ____ : ____ : ____ : ____ : ____ Indifferent
Organized ____ : ____ : ____ : ____ : ____ Disorganized
Rewarding ____ : ____ : ____ : ____ : ____ Punitive
Structured ____ : ____ : ____ : ____ : ____ Unstructured
Professional ____ : ____ : ____ : ____ : ____ Unprofessional
Stimulating ____ : ____ : ____ : ____ : ____ Dull
Responsive ____ : ____ : ____ : ____ : ____ Unresponsive

Aide Characteristics

Clear ____ : ____ : ____ : ____ : ____ Vague
Confident ____ : ____ : ____ : ____ : ____ Unsure
Patient ____ : ____ : ____ : ____ : ____ Abrupt
Enthusiastic ____ : ____ : ____ : ____ : ____ Indifferent
Cooperative ____ : ____ : ____ : ____ : ____ Reluctant
Organized ____ : ____ : ____ : ____ : ____ Disorganized
Responsive ____ : ____ : ____ : ____ : ____ Unresponsive
Professional ____ : ____ : ____ : ____ : ____ Unprofessional

Pupil Characteristics

Confident ____ : ____ : ____ : ____ : ____ Confused
Cooperative ____ : ____ : ____ : ____ : ____ Disruptive
Satisfied ____ : ____ : ____ : ____ : ____ Frustrated
Enthusiastic ____ : ____ : ____ : ____ : ____ Passive
Attentive ____ : ____ : ____ : ____ : ____ Restless

Comments:

END OF INSTRUCTIONAL PERIOD

Diagram of Classroom

O = pupil

Ⓧ = teacher

X = aide

☐ = table

◡ = desk

⊓ = carrell

TM = teaching machine

LC = learning center

S = storage cabinet

1 = primary site visitor

2 = associate site visitor

Observer Comments:

OBSERVATION SUMMARY

PIP-Specified Procedures	3=high	2=moderate	1=low
Use of contracts			____
Use of gaming and simulation			____
Teacher involvement in gaming/simulation			____
Integration of gaming and simulation with curriculum			____
Use of learning centers			____

Materials and Activities	3=high	2=moderate	1=low
Variety of materials in use		____	
Use of commercial materials		____	
Use of teacher-made materials		____	
Variety of simultaneous activities		____	
Variety of activities over time		____	
Pupil time on task		____	____%
Pupil time off task		____	____%

Pupil Activities	Pupil Selected	____ : ____ : ____ : ____ : ____	Instructor Assigned
Pupil Grouping Patterns	Pupil Selected	____ : ____ : ____ : ____ : ____	Instructor Assigned
Materials	Pupil Selected	____ : ____ : ____ : ____ : ____	Instructor Assigned
Instruction	Pupil Paced	____ : ____ : ____ : ____ : ____	Other Paced
Pupil/ Instructor Interactions	Pupil Initiated	____ : ____ : ____ : ____ : ____	Instructor Initiated
Gaming/ Simulation	Pupil Directed	____ : ____ : ____ : ____ : ____	Instructor Directed

Time completed ______________

Observer comments:

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